***Project 10988 Glossary - Manufacturing Processes***

|  |  |  |
| --- | --- | --- |
| **German** | **English-US** | **Alternatives/Contexts/Comments** |
| 3D-Druckverfahren | 3D printing process | 3D printing (3DP) |
| abgebildet | reproduced | mapped, imaged  Machining context |
| Abläüfe | process or flow |  |
| Abmessungen | dimensions | measurements, depending on context |
| Abriebfestigkeit | abrasion resistance | AMP context |
| Absätze | recesses | shoulders  Laminating process context |
| abschält | peels off | strips off, shaves off  Machining context |
| Abtragen | removal | ablation, material removal  Cutting context |
| Additiven Verfahren | additive processes | generative processes |
| Adhäsionskraft | adhesive force | adhesion force  adhesion strength  Bonding context |
| AFK | AFRP aramid fiber-reinforced plastics |  |
| Airless-Verfahren | airless method | Coatings context |
| Alkyd-Harze | alkyd resins | Coatings context |
| Aluminiumblechen | aluminum sheets | Layered composites context |
| Aluminiumlegierung | aluminum alloy | Is the UK aluminium preferred here? |
| Aluminium-Lithium-Werkstoff | aluminum-lithium material | aluminum lithium alloy material |
| Andruckkräfte | pressure forces | Riveting context |
| Anhang 1 - Literaturverzeichnis | Appendix 1 – List of References | IU Nomenclature DE-EN |
| Anhang 2 – Abbildunsverzeichnis | Appendix 2 – List of Tables and Figures | IU Nomenclature DE-EN |
| Anschauungsmodelle | illustrative models | display models  visual aid models  AMP context |
| Anschnitt | gate | Casting context |
| Anspritzungen | gates | Rapid tooling context |
| Antrieb | drive |  |
| Antriebsleistung | driving power | propulsive power |
| Antriebsmaschine | drive machine | engine, propulsion engine, propulsion machinery |
| Antriebstechnik | drive engineering | drive technology |
| Arbeitsebene | working plane | Fused deposition modeling context |
| Arbeitskammer | working chamber | Electron beam Welding context |
| Arbeitsperson | employee | personnel |
| Arbeitsprozess | work process |  |
| Arbeitssystem | work system |  |
| atomare Verbindung | atomic bond | Soldering context  Bonding context |
| atomaren Bindungskräfte | atomic bonding forces | Bonding context |
| Ätzen von Flächen durch Säuren | etching of surfaces with acids | Machining context |
| Aufbauschneidenbildung | built up edge | cutting edge build-up  built-up edge formation  Machining context |
| aufgeblasen | inflated | Blow Molding context |
| aufgequetschten (Lock Bolt oder Schließringniet) | crimped-on  (lock bolt or lock ring rivet) | squeezed-on  Riveting context |
| aufgeschmolzen | melt or melted | Selective laser sintering context |
| aufgeschraubten (Schraubniet oder Hi-Lock | screwed-on (screw rivet or hi-lock) | Riveting context |
| Aufschmelzen | fusing | Selective laser sintering context |
| Auftrag | Order |  |
| Auftragsbearbeitung | order processing |  |
| Auftragszeit | Order Time |  |
| Auftragszeiten | Work order time | Within definition of Vorgabezeit |
| Aufwand | expenditure | effort, cost and effort  Very context dependent |
| aufweisen | exhibit | Properties context |
| Aus der Praxis | case study | IU Nomenclature DE-EN |
| Ausführungszeit | Execution Time |  |
| Ausführungszeit | Processing Time | Execution Time also per REFA |
| Ausgangsmaterial | base material | raw material, starting material, |
| Ausgangsmaterial | base material | starting material  *(Halbzeug - semi-finished product)*  Bending context |
| ausgehärtet | cured | annealed  Layered composites context |
| ausgestoßen | ejected | etruded  removal from mold injection Molding context |
| ausgetrieben | drive out or cast out or expel | Selective laser sintering context |
| aushärtbare | age-hardened | age-hardenable  Fusion Welding context |
| ausscheidungsgehärteten Aluminiumlegierungen | precipitation-hardened aluminum alloys | Welded materials context |
| Außenhaut | skin | outer skin  Aircraft context,  shell  Layered composites context |
| auszuführende | to be executed | Based on REFA definition Ausführen = Execute |
| Autoklave | autoclave | Layered composites context |
| Automatisierungsgrad | degree of automation | level of automation |
| Automobil- und Luftfahrtindustrie | automotive and aviation industries | automobile and aircraft industries |
| Automobilbau | automobile manufacturing | automotive engineering or industry |
| Basisliteratur | basic reading | IU Nomenclature DE-EN |
| Basisprimer | base primer | Coatings context |
| Baugruppe | assembly (noun) |  |
| Baumusterzulassungen | type approvals | Additive manufacturing processes context |
| Bauplatt form | build platform | work platform, build plate mold  AMP context |
| Bauraum | installation space | building area  Selective laser sintering context  installation space  Automotive modeling |
| Bauteil | component | parts in some contexts, usually when together with *Komponent* |
| Bauteilversteifung | component stiffening | component rigidity  Bonding context |
| Bauweise | design method | construction, construction method |
| Bauweisen | design methods | as above, in plural |
| Beanspruchung | stresses | strain, load  Bonding context |
| Bearbeitungsgeschwindigkeit | processing speed | Additive processes context |
| Bearbeitungsvorgänge | machining operations | Machining context |
| Beeinflussbare Hauptnutzungszeit | Influenceable Main Utilization Time |  |
| Beeinflussbare Tätigkeitszeit | Influenceable Activity Time |  |
| begrenzenden Werkzeugen | limiting tools | limited tools  Drop Forging context |
| Beibehalten | preservation | preserving cohesion |
| Belastbarkeit | load-bearing capacity | Bonding context |
| Belastung | load |  |
| Belastung | stress | only in some contexts, such as highly stressed |
| Belastungsfähigkeit | load capacity | Drop Forging context |
| Belegungszeit | Occupancy Time |  |
| Benetzung | wetting | Bonding context |
| Beplankung | panelling | planking  Aircraft context |
| Bereich der Schmelze | molten state | melt range, molten range |
| berührungsfreundliche | contact-friendly | tactile surface context |
| Beschichten | coating |  |
| Beschichtungstechnik | coating technology | coating technique, context dependent |
| beschossen | bombarded | CMP context |
| Bestrahlen | irradiation | CMP context |
| betrieblichen Rechnungswesens | operational accounting |  |
| Betriebseinrichtung | operating facility |  |
| Betriebsmittel | Operating Resources |  |
| Betriebsmittelausführungszeit | Equipment Execution Time | Operating Resources Execution Time also per REFA |
| Betriebsmittelgrundzeit | Equipment Basic Time | Operating Resources Basic Time |
| Betriebsmittelrüstgrundzeit | Equipment Basic Setup Time | Operating Resources Basic Setup Time also per REFA |
| Betriebsmittelrüstzeit | Equipment Setup Time | Operating Resources Setup Time also per REFA |
| Betriebsmittelverteilzeit | Equipment Allowance Time | Operating Resources Allowance Time also per REFA |
| betriebswirtschaftlichen Kennzahlen | operational key figures |  |
| Beurteilungsmerkmale | assessment of characteristics | assessment of features |
| Bewegungsdaten | movement data | Stereolithography context |
| Biegemoment | bending moment | Bending context |
| Biegesteiﬁgkeit | bending rigidity | materials context, stiffness in some other contexts |
| Biegung | bending | load condition context, Belastungszustände |
| Bindemittel | bonding agent | binding agent, binder  3D printing context |
| Bindungsbrücken | bond bridges | Additive manufacturing processes context |
| Bindungsenergie | bonding energy | binding energy  Bonding context |
| Bindungsmechanismus | bonding mechanism | binding mechanism  Bonding context |
| bionischen Konstruktionen | bionic designs | bionic constructions,  Selective laser sintering context |
| Blasformen | blow molding |  |
| Blasformprozess | blow molding process |  |
| Blech- und die Massivumformung | sheet metal forming and solid forming |  |
| Blechzuschnitten | sheet metal blanks | Deep-drawing context |
| Bohren | drilling | Machining context |
| Brachzeit | Interruption Time |  |
| breiigen Zustand | pasty state | mushy state, pulpy state |
| breiiges | pasty | selective electron beam melting context |
| Brennen | firing | CMP context |
| CAD-Daten | CAD data | Additive manufacturing processes context |
| CFK carbonfaser- verstärkte Kunststoffe | CFRP carbon fiber-reinforced plastics |  |
| chemische Bearbeitung | chemical processing | chemical metal processing |
| chemischen Wechselwirkungen | chemical interactions | Bonding context |
| chemisches Abtragen | chemical removal | chemical ablation  Machining context |
| Clips | clips | Aircraft assemblies context, automated riveting |
| CNC | computer numerical control | Machines, machinery context |
| CO2 und Schadstoffemissionen | CO2 emissions and pollutants | or pollutant emissions |
| Collar | collar | Riveting context |
| Computer Aided Machining | Computer Aided Manufacturing | Computer Aided Machining, slightly less common  Additive manufacturing processes context |
| Concurrent Engineering | Concurrent Engineering | Rapid Prototyping context |
| Cyber-physische Produktionsanlagen | cyber physical production plants | Cyber-physical production plants  The term is commonly used with or without the hypen |
| Dampfkapillare | keyhole | vapor capillary  Laser beam Welding context |
| Dauerfestigkeit | fatigue strength | long life fatigue strength (LLF)  in Automotive context (Betriebsfestigkeit) |
| Decklackschicht | top coat | Coatings context |
| Dehnungssteiﬁgkeit | elongation rigidity |  |
| Dichte | density | thickness  context-dependent |
| dichtende Verbindungen | sealing joints | Bonding context |
| Drehen | turning | lathing |
| Drei-Schicht-Betrieb | three-shift operation | three-shift  Machining context |
| Druck | compression | load condition context, Belastungszustände |
| Druckeigenspannungsfeld | residual compressive stress field | CMP context |
| Druckinjektion | resin injection | pressure injection,  Pultrusion context, See Figure 2.10 |
| dünnwandiger | thin-walled | Machining context |
| durchgesetzt | implemented | asserted, established |
| Durchmischung | mixing | Friction stir welding context |
| Duroplast | Duroplast | thermoset  Duroplast is a common, German trademarked thermosetting plastic. *Thermoset* is the broader term.  Layered composites context |
| dynamischen Belastungsfähigkeit | dynamic load capacity | See above  Drop Forging context |
| efﬁzienter | efficient | efﬁcienter  Cyber physical context |
| Eigenschaft | property | characteristic |
| Eigenspannung | residual stress |  |
| Eigenspannung | residual stress | internal stress, internal tension   Welding context |
| einbaufertig | ready for installation | ready-to-fit  ready for installation |
| Einﬂussgröße | Influence Factor |  |
| Einﬂussgrößen | inﬂuence factors | inﬂuences, influence parameters  Bonding context |
| Einführung | introduction | IU Nomenclature DE-EN |
| eingespannt | clamped | tensioned  Stretch-forming context |
| eingeteilt | classified | divided as per DIN 8580 |
| Einguss | sprue |  |
| Eintauchstelle | plunge location | immersion point  Friction stir welding context |
| Einwirkung von Elektrolyten unter elektrischer Spannung | exposure to electrolytes under electrical voltage | Machining context |
| Einzel- oder Kleinstserienfertigung | individual or small batch production |  |
| Einzel- oder Kleinstserienfertigung | individual or small batchproduction | repetition  Additive manufacturing processes context |
| Einzelfertigung | individual production | piece production, individual manufacture |
| Eisenwerkstoffe | ferrous materials |  |
| elastischen Grenze | elastic limit | elastic boundary |
| elektrochemische Bearbeitung | electrochemical processing | electrochemical metal processing |
| elektrochemisches Abtragen | electrochemical removal | electrochemical ablation  Machining context |
| elektronenstrahlbasierten (SEBM) | selective electron beam melting (SEBM) | Selective laser sintering context |
| elektrostatischen Spritzpistolen | electrostatic spray guns | Coatings context |
| eloxiert | anodized | eloxed  Layered composites context |
| Endkontur | final contour | Additive manufacturing processes context |
| endkonturnahe | near-net-shape | near net shape  AMP context |
| Entfestigung | softening | Welded materials context |
| Entformung | demolding |  |
| Entwicklerschicht | developer layer | Selective beam melting context (SLM and SEBM) |
| Epoxidharze | epoxy resins | AMP context |
| Erholungszeit | Recovery Time |  |
| Erholungszeiten | Recovery Time |  |
| Ermüdung | fatigue |  |
| erschmolzenen | melted | cast |
| Erstarrung | solidification | Welding context |
| Ertrag | revenue | yield, return |
| Extruder (Plastiﬁziereinheit) | extruder (plasticizing unit) | (plastiﬁcation unit)  Injection Molding context |
| Fahrgestelle | frame or undercarriage | aircraft = undercarriage, landing gear  automobile = chassis |
| Fahrwerk | frame or undercarriage | aircraft = undercarriage, landing gear  automobile = chassis |
| Fahrwerksteile | undercarriage components |  |
| Falten | wrinkles | creases, folds |
| Fasergewebe | fibrous woven fabric | fibrous fabric, fabric  Layered composites context |
| Fasern | fibers |  |
| Faserverbundwerkstoffe | fiber-reinforced composites | fiber composites |
| Fertigerzeugnisse | finished product |  |
| Fertigung | production | in production line context |
| Fertigungsaufgabe | manufacturing task | production task |
| Fertigungseinrichtung | production machinery | production line or manufacturing machinery or line |
| Fertigungsergebnis | manufacturing result | production result |
| Fertigungskosten | production costs |  |
| Fertigungsplanung | production planning | manufacturing planning, in context of manufacture planning |
| Fertigungstechnik | manufacturing technology | manufacturing engineering |
| Fertigungsverfahren | manufacturing processes | manufacturing methods production processes  production methods |
| festhaftende Schichten | firmly adhering layers | Coatings context |
| Festigkeit | strength | context dependent: stability, cohesiveness |
| Festigkeitsanforderung | strength requirement | structural requirement,  Riveting context |
| Festigkeitseigenschaft | strength properties |  |
| Festigkeitsträgern | reinforcing materials (fibers) |  |
| Festkörperbereich | solid state | occasionally solid phase, depending on context.  (*solid phase state*, *liquid phase state* and *gaseous phase state* are technically correct, but rarely used.) |
| Fixierungssysteme | fixation systems | attachment systems,  affixing systems  Assembly processes context |
| Flächennahtdopplern | surface seam doublers | doublers,  Aircraft manufacturing & Bonding context |
| flächigen | planar | flacial |
| Fließgrenze | yield point | related to:  flow stress/yield stress (Fließspannung/Streckgrenze) |
| Fließpressen | extrusion | impact extrusion |
| Fließspannung | flow stress | followed by (yield point) in Course Book  Forming technology context |
| Flugzeugbau | aircraft manufacturing | aircraft engineering or industry |
| ﬂüssige Metall | liquid metal |  |
| Folien | foils | in metals context |
| Folien | films | in plastics context |
| Folien, Platten | sheets, plates | films, sheets |
| Formelemente | form elements | mold element, shaping elements |
| Formen | forming, molding | in DIN  Forming for shaping  molding if from powder or granulated stuff  molding = Casting context  forming = Primary shaping context |
| Formenbau | mold making | mold construction |
| Formgenauigkeit | shape accuracy | form accuracy |
| Formherstellung | mold making | mold production  form production |
| Formkasten | molding box | molding flask = UK term |
| Formkörpe | shaped bodies | molded bodies, molded/shaped articles |
| formlosen Stoffen | formless materials | formless substances |
| Formstoff | mold material |  |
| Formstoffe | molding materials | molding material  forming material |
| Formteilen | molded parts | molded components, molded bodies |
| Formwachse | molding waxes | form waxes  mold waxes  Fused deposition modeling context |
| Formwerkzeug | mold | molding tool  mold tool, forming tool  DIN & in the sentence structure makes sense |
| Formwerkzeug | forming die | forming tool  molding tool  Stretch forming context |
| Fragen zur Selbstkontrolle | self-check questions | IU Nomenclature DE-EN |
| Fräsbearbeitungszentren | milling machining centers | Context = CNC machines or CNC milling machines (CNC-Fräsmaschinen) also referred to as machining centers   CNC = Computer Numerical Control  Machining context |
| Fräseinrichtungen | milling equipment | Laminating process context |
| Fräsen | milling | metal works |
| Fräsen | milling | item |
| Freiformschmieden | open die forging | Drop Forging context |
| Fügelinie | joining line | joint line  Friction stir welding context |
| Fügen | joining |  |
| Fügespalt | joint gap | Friction stir welding context  sheet separation in Resistance welding context |
| Fügeteiloberfläche | adherend surface | Bonding context |
| Füller | filler | Coatings context |
| Funken überschlägt | spark flashes over | Machining context |
| Funkenerosion | spark erosion | electrical discharge machining |
| Funktionsabläufe | functional processes | functional procedures  Assembly processes context |
| Funktionstests | functional testing | Rapid manufacturing context |
| Fused Deposition Modeling | Fused Deposition Modeling | Fused deposition modeling context |
| Gasaufnahme | gas absorption | Welding context |
| gasförmigen, ﬂüssigen oder festen Zustand | gaseous, liquid or solid state |  |
| gebogenen Rohren | bent pipes | bent conduits, curved conduits, bent tubes, curved tubes |
| gebracht | brought or transformed | yielded, *plastically* transformed/yielded  Forming technology context |
| Gebrauchsmustern | utility models | Additive manufacturing processes context |
| gefrästen | milled | Machining context |
| Gefüges | microstructure | structure  framework, microstructure  Riveting context See Figure 2.27  item |
| Gefügestruktur | microstructure | Casting context |
| gegossen | poured |  |
| Gelege | non-woven fabrics | scrims - used in the textile industry  Layered composites context |
| geometrisch bestimmten Schneidenformen | geometrically defined cutters | geometrically defined cutting patterns   or patterns, as in context above |
| geometrisch unbestimmten Schneiden | geometrically undefined cutter | Machining context  item |
| geometrische Daten | geometric data | Additive manufacturing processes context |
| Gerätes | device or equipment | Selective laser sintering context |
| geringer Umformkraft | low forming force |  |
| Gesamtheit | totality | aggregate or whole |
| gesamtheitliche | holistic |  |
| Gesamtschichtdicke | total layer thickness | coating thickness (total)  Coatings context |
| geschweißten Halbschalen | welded half-shells | aircraft manufacturing using Tungsten inert gas welding |
| Gesenkschmieden | drop forging | die forging  Forming technology context |
| gestört | disturbed |  |
| geteilte Werkzeug | split mold | split tool  divided tool, partitioned  Injection Molding context |
| Gewebe | woven fabrics | fabrics  Layered composites context |
| Gewichtseinsparung | weight reduction |  |
| Gewichtsverhältnis | weight ratio |  |
| Gewindebohren | tapping | Context: cutting a female screw thread |
| gezogen | drawn | wrought  Stretch-forming context |
| GFK | GFRP glass fiber-reinforced plastics |  |
| Gießanlage | casting system, casting plant/installation |  |
| Gießen | casting | within primary shaping main group, along with extrusion |
| Gießereitechnik | casting technology | casting technique, foundry technology or engineering, or simply casting, depending on context |
| Gießmethode | casting method |  |
| Gießverfahren | casting process |  |
| Glasfaserfolien (GFK) | glass fiber film (GFRP) | GFRP context  Layered composites context |
| Glasfasermatte | glass fiber mats | Layered composites context |
| Gleichspannungsimpulsen | DC voltage pulses | Machining context |
| Granulat | granules | granulate  granule |
| Gravur | engraving | Drop Forging context |
| Grenzschicht | boundary layer | Bonding context |
| Größen | magnitudes | sizes, ratings  Bonding context |
| großﬂächiges Kleben | large surface area bonding | Large-scale bonding  large area  Bonding context |
| großformatigen Blechen | large-format sheets | large-scale sheets  Stretch Drawing context |
| Großmontagezellen | large assembly cells | Aircraft assemblies context |
| Großschalen | shells | Aircraft assemblies context, automated riveting |
| Großserie | large-scale production |  |
| Grundierungsmittel | primer | undercoating  Layered composites context |
| Grundzeit | Basic Time |  |
| Grünling | green compact | materials & metallugy context |
| Gruppe | group |  |
| Gussgehäuse | cast housing | cast chassis, |
| Gussstück | casting | casting piece |
| Gussteile | cast parts | castings |
| Haftfestigkeit | adhesive strength | adhesion  AMP context |
| Halbzeuge | semi-finished products | wrought products, wrought materials  Layered composites context |
| Härtersystem (eingemischten) | (mixed in) curing system | hardener system (mixed)  Layered composites context |
| Härtersysteme | hardening agent | hardening system |
| Hartmetall-Wendeschneidplatten | carbide indexable inserts | carbide inserts  carbide cutting inserts, indexable carbide inserts  Machining context  item |
| Haupteinﬂussfaktoren | main influencing factors | main input factors |
| Hauptgruppe | main group | DIN 8580 |
| Hauptnutzungszeit | Main Utilization Time |  |
| Hautfeldern | skin panels | Aircraft assemblies context |
| Heißluftrohrleitungen | hot-air piping | aircraft manufacturing usingTungsten inert gas Welding context |
| herausgebrochenen | broken off | broken out |
| Herstellkosten | production costs | manufacturing costs |
| Herstellung | production | manufacture, manufacturing |
| Herstellung | fabrication rather than production | rather than production  Additive processes context |
| Hinterschnitte | undercuts | Laminating process context |
| hoch belasteten Werkstücke | highly stressed workpieces | highly loaded work pieces  CMP context |
| hochbelastete | highly stressed | highly loaded |
| Hochgeschwindigkeitsbearbeitungszentren | high speed machining centers | no hypen  Machining context |
| Hochgeschwindigkeitszerspanung | high speed cutting (HSC) | high speed milling (HSM)  high speed machining (HSM) |
| höchst belastbare | extremely loaded | extremely stressed |
| hoher Geschwindigkeit | high velocity | high speed  CMP context |
| hohlen Formkörpern | hollow molded bodies |  |
| Hohlkörper | hollow body | Deep-drawing context |
| Hohlräume | cavity |  |
| Honen | honing |  |
| Hüftpfanne | acetabulum | Implementation context |
| Hybridbauweise | hybrid constructions | hybrid designs |
| Hybridfügen | hybrid joining | Bonding context |
| Implan tate | implants | implantates  Rapid manufacturing context |
| Isoliereigenschaften | insulation properties | insulating properties  AMP context |
| Kalandrieren | Calendering |  |
| Kaltumformung | cold forming | Forming technology context |
| Kapitalbindungskosten | capital commitment costs |  |
| Karosseriebau | body construction | body manufacture |
| Keimbildung | nucleation |  |
| Kern +derivatives | core | cavity |
| Klausurfragenkatalog (KFK) | Exam question catalog | IU Nomenclature DE-EN |
| Klebeﬂächen | adhesive surfaces | Bonding context |
| Kleben | adhesive bonding | bonding  adhesive bonding, subgroup in joining context, |
| Kleben | adhesive bonding | bonding  Bonding context |
| Klebeschicht | adhesive layer | Bonding context |
| Klebetechnik | bonding technology | bonding technique  adhesive bonding technique,  Bonding context |
| Klebetechnologie | adhesive bonding technology | bonding technology  Bonding context |
| Klebeverbindung | adhesive joint | bond  adhesive connection,  Bonding context |
| Klebeverbindung | adhesive joint | adhesive bond  Bonding context |
| Klebfuge | bond line | glued joint  Bonding context |
| Klebstoffes | adhesive | Bonding context |
| kleine Stückzahlen | small quantities | small batches, context dependent |
| kleinen Stückzahlen | small batches | small quantities, context dependent |
| Kleinserie | small batch | small series |
| klimatisiert | air-conditioned | climatized |
| Kohlefaserverbundwerkstoffe | carbon fiber composite |  |
| kohlenstofffaserverstärkte Kunststoffe | carbon fiber-reinforced plastics |  |
| Komponent | component |  |
| Konstruktionsphilosophie | design philosphy | engineering philosphy or construction philosphy |
| Konstruktionsprinzip | design principle | engineering principle  construction principle |
| Konstruktionswerkstoffe | construction materials | design materials |
| Kornbildung | grain formation | grain build-up  Fusion Welding context |
| Korrosions-, Hitze- und Verschleißbeständigkeit | corrosion, heat and wear resistance |  |
| Korrosionsschutz-Grundierung | anti-corrosion primer | Coatings context |
| Kostenart | cost element |  |
| Kostenrechnung | cost accounting |  |
| Kostenstelle | cost center |  |
| Kostenträger | cost unit |  |
| Kräfte und Spannungen | forces and stresses |  |
| Kraftﬂuss | stress flow | force flow |
| Kraftübertragung | force transmission | Bonding context |
| Kraftverteilung | force distribution | Bonding context |
| Kristallbildung | crystal formation | Welding context |
| Kristallbildung | crystal formation | crystal build-up  Fusion Welding context |
| Kristallwachstum | crystal growth | Welding context |
| Kugeln | balls | beads  CMP context |
| Kugelstrahlen als Verfestigungsstrahlen (Verfahren) | shot peening | shot blasting  Kugel... shot blasting or shot peening  Verfestigungs… shot peening only |
| Kühlkanäle | cooling channels |  |
| Kunststoffen | plastics | not plastic materials |
| Kunststoffgranulat | plastic granules | plastic granulate  nurdle(s), plastic granules |
| Kunststoffverbundbauteil | plastic composite component | or part, assembly |
| Lackierschicht | paint layers | coating layer,  paint finishes  Coatings context |
| Lackiertechnik | painting technology | Coatings context |
| Lackierungen | paints | paint finishes  Coatings context |
| Lagerbindungskosten | inventory costs |  |
| Laminat | laminate | Layered composites context |
| Landeklappen | flaps | landing flaps  Aircraft manufacturing & Bonding context |
| Längenausdehnung | linear expansion | length expansion  linear expansion |
| Längsnahtdopplern | longitudinal seam doublers | doublers  Aircraft manufacturing & Bonding context |
| längsnahtgeschweißten Rohrstücken aus Titan | longitudinally welded titanium tube sections | longitudinally welded titanium tubes  aircraft manufacturing usingTungsten inert gas Welding context |
| Längsversteifungen | longitudinal stiffeners | aircraft manufacturing & Bonding context |
| Läppen | lapping | Machining context |
| Lauf | runner | Casting context |
| lauffähige | run capable | runnable  Automotive testing context |
| lauffähige | runnable | Rapid Tooling context |
| Layer Laminated Manufacturing (LLM) | Layer Laminated Manufacturing (LLM) | Laminating process context |
| Layer Object Modeling (LOM) | Laminated Object Manufacturing (LOM) | Layer Object Modeling (LOM)  Laminating process context |
| Legierungsbestandteil | alloying element | alloying constituent |
| Leichtbau | lightweight construction | lightweight engineering, lightweight design |
| Leichtbau | lightweight construction | lightweight design |
| Leistungsdichte | power density | energy density  power density  electron beam welding context |
| Leistungsgrad | Performance degree |  |
| Leistungsrechnung | performance accounting | results accounting |
| Leitwerk | tail unit | tailplane, empennage  Layered composites context |
| Lektion | unit | IU Nomenclature DE-EN |
| Lernziele | study goals | IU Nomenclature DE-EN |
| Lernzyklus | section | IU Nomenclature DE-EN |
| Lochen | punching | Separating (punching) context |
| Long Tail | long tail |  |
| Long Tail Bereich | long tail segment |  |
| Lösungen: Fragen zur Selbstkontrolle | solutions for self-check questions | IU Nomenclature DE-EN |
| Löten | soldering | brazing, subgroup in joining context, |
| Luft- und Raumfahrt | aerospace | when air & space combined |
| Luftverteilers | air distributor | Rapid Tooling context |
| Lunker | blowholes |  |
| Magnetisieren | magnetization | CMP context |
| Maschinen- und Anlagenbau | machinery and plant engineering |  |
| Maschinenbau | machine manufacturing | machinery manufacturing (mechanical engineering doesn’t fit in several contexts) |
| Maschinenbau, Automobilbau und Flugzeugbau | machine manufacturing, automobile manufacturing and aircraft manufacturing |  |
| Maschinenbau, Automobilbau, Flugzeugbau | machine, automobile and aircraft manufacturing | or engineering |
| Maschinenbau, Fahrzeugtechnik, Flugzeugbau | machine manufacturing, automotive engineering, aircraft manufacturing |  |
| Maß der Adhäsion | degree of adhesion | measure of adhesion  Bonding context |
| Maß-, Form- und Lageabweichung | dimensional, form and positional deviation |  |
| Maß-, Lage- und Formgenauigkeit | dimensional, positional and form accuracy |  |
| Massenfertigung | mass production |  |
| Massenproduktion | mass production |  |
| Maßgenauigkeit | dimensional accuracy | AMP context |
| Maßgenauigkeiten | dimensional accuracies | Rapid Prototyping context |
| Materialanhäufung | material accumulation |  |
| Materialüberhängen | material overhangs | Multi-jet Modeling Context |
| Matrixwerkstoffen | matrix materials |  |
| Matrize | die | tool, matrice  Deep-drawing context |
| Matten | mats | Layered composites context |
| mechanischen Formschluss | mechanical form fit | mechanical form closure  mechanical rigid connection  Bonding context |
| Mengenleistung | quantity performance | volume output, quantity output, quantity performance as per REFA |
| Merke | note | IU Nomenclature DE-EN |
| Metallfolien | metal foils | Laminating process context |
| metallischen Pulver | metallic powder | materials context |
| Metall-Phosphat-Schicht | metal-phosphate layer | Coatings context |
| Metallpulver | metallic powder | materials context, otherwise metal powder |
| Metallverarbeitung | metalworking | metal working metal processing  Machining context |
| Mikro-Deformationen | micro-deformations | CMP context |
| Mischkristallbildung | solid solution formation | mixed crystal formation  Soldering context |
| Modell | pattern | Casting context, model is also used |
| Modellbau | model making | model construction, research indicates that *pattern* is used in the Casting context. |
| Modellbau | pattern making | Casting context, model is also used |
| Modelleinrichtung | pattern equipment | pattern set-up |
| Modelltrauben | pattern clusters | pattern tree |
| Modulbeschreibung | module description | IU Nomenclature DE-EN |
| MTM Methode (Methods-Time Measurement) | MTM- Methods Time Measurement |  |
| Multi-Jet Modeling (MJM) | Multi-Jet Modeling (MJM) | Multi-jet modeling context |
| Nacharbeit | reworking | machining, finishing work, subsequent work |
| Nahtformen | seam forms | weld shapes  welding context |
| Napf | cup | Deep-drawing context |
| Narbungen | grain | graining  surface texture context |
| Nebennutzungszeit | Ancillary Utilization Time |  |
| Nebennutzungszeit | Ancillary Utilization Time |  |
| Neigung | tendency | or propensity or tendency = Tendenz |
| Nennmaß | nominal dimension | nominal dimension nominal size |
| Netzteilnehmer | network subscribers | Cyber physical context |
| neuartigen Werkstoffen | novel materials |  |
| nicht korrosionsbeständigen Materialien | non-corrosion resistant materials |  |
| nicht mischbar | immiscible |  |
| Niederhalter | blank holder | Deep-drawing context |
| Niederhalterkraft | blank holder force | Deep-drawing context |
| Nieten | rivet |  |
| Nietverbindungen | riveted joints |  |
| Nutzlast | useful load | utilities load, payload |
| Nutzlastanteil | payload ratio |  |
| Nutzlasten | useful load | utilities load, payload |
| Nutzungsphase | service life | use phase |
| Ober- und Untergesenk | upper and lower die | Drop Forging context |
| Oberﬂächengüte | surface finish | Coatings context |
| Oberﬂächenqualität | surface quality | Rapid prototyping context |
| Oberﬂächenstruktur | surface structure |  |
| Oberﬂächenverfestigungs-Prozesse | surface hardening processes | CMP context |
| Oberﬂächenzustände | surface conditions | Rapid tooling context |
| oberﬂächlich aufgeschmolzen | superficially melted | Selective laser sintering context |
| Oberkasten | Cope | = top-half of molding box |
| Ölbad | oil bath | Drop Forging context |
| optische Effekte | optical effects | visual effects  Coatings context |
| original Serien-Kunststoffsorten | original series plastic grades | Rapid Tooling context |
| Passnieten | fit-rivets | fitting rivets  fitted rivets |
| Pflichtfach | required course | IU Nomenclature DE-EN |
| Pflichtliteratur | required reading | IU Nomenclature DE-EN |
| Phasengrenzﬂächen | phase boundaries | Bonding context |
| Phosphatsalzlösungen | phosphate salt solutions | Coatings context |
| Piezo-Injektor | piezo injector | 3D Printing Context |
| plastiﬁziert | plasticised | plasticizes  plasticiﬁes, plastiﬁzes  Friction stir welding context |
| plastische Formgebung | plastic forming | Forming technology context |
| plastischen Bereich | plastic range | plastic state  plastic range  Forming technology context |
| Platinen | blanks | Deep-drawing context |
| Platten | plates | Deep-drawing context |
| Plattenwerkstoffe | sheet materials | board materials  sheet materials |
| Poly-Jet-Verfahren (PJM) | Poly-Jet Modeling (PJM) | Multi-jet modeling context |
| Porenraum | pore space | pore volume |
| Positiongenauigkeit | position accuracy |  |
| Pressdrucke | mold pressure | molding pressure |
| Pressschweißen | pressure welding | Welding context |
| Pressvorgang | pressing process | pressure welding (Pressschweißen) context |
| Primärstruktur | primary structure | = load-bearing main structure |
| Produktion | production |  |
| Produktionsanlage | production system | production facility, production plant, |
| Produktionskosten | production costs |  |
| Produktionstechnik | production technology | production engineering |
| Proﬁlüberdeckung | proﬁle overlap |  |
| Prozessketten | process chains | Additive manufacturing processes context |
| Prozesszone | process zone | electron beam Welding context |
| punktförmig | punctiform | point-like  Machining context |
| Putzen, Schleifen, Strahlen | buffing, grinding and blasting |  |
| Quer- und Seitenrudern | ailerons and rudders | aircraft manufacturing & Bonding context |
| Randbedingung | boundary conditions | framework conditions in some contexts |
| Randbedingung | boundary conditio | repetition  Selective laser sintering context  Additive manufacturing processes context |
| Randzone | boundary zone | border area  border zone, marginal zone  CMP context |
| Rapid Prototyping, Rapid Tooling, Rapid Manufacturing | Rapid Prototyping, Rapid Tooling, Rapid Manufacturing |  |
| Rationalisierungseffekte | streamlining effects | rationalization effects  Machining context |
| Räumen | broaching | Machining context |
| Rautiefen | roughness | roughness depth |
| rechtliche Aspekte | legal aspects | legal issues  Additive manufacturing processes context |
| REFA-System | REFA-System |  |
| Reichweite | range | Bonding context |
| Reinigungsstrahlen | abrasive blast cleaning | blast cleaning  CMP context |
| Rekristallisationstemperatur | recrystallization temperature | Forming technology context |
| Repetitorium | review book | IU Nomenclature DE-EN |
| Rissausbreitung | crack propagation | aircraft manufacturing & Bonding context |
| Risse | cracks | fissures  Deep-drawing context |
| Rissproblematik | cracking problem | CMP context |
| röhrenförmiger Hohlraum | tubular cavity | tubular core  tubular cavity,  Laser beam welding context |
| Rohteil | raw part | unmachined part, blank  Drop Forging context |
| Ronden | circular blanks | Deep-drawing context |
| Rotationsbewegung | rotary motion | rotational movement  rotational motion  Friction stir welding context |
| Rumpfpaneele | fuselage panel | Layered composites context |
| Rumpfschale | fuselage shell | Aircraft assemblies context |
| Rüsterholungszeit | Setup Recovery Time |  |
| Rüstgrundzeit | Setup Basic Time |  |
| Rüstverteilzeit | Setup Allowance Time |  |
| Rüstvorgänge | setup procedures | set-up processes  AMP context |
| Rüstzeit | Setup Time |  |
| Sachliche Verteilzeit | Functional Allowance Time | Factual Allowance Time also per REFA |
| Sägen | sawing | Machining context |
| Sandwich-Bauteile | sandwich components | sandwich part  aircraft manufacturing & Bonding context |
| Schaffen | creation (create cohesion) |  |
| Scherschneiden | shearing | shear cutting  Separating (punching) context |
| Schichtverbund | layered composite | layer bonding, multilayer composite |
| Schichtverbunde | Glass laminate aluminum reinforced epoxy (GLARE) | glass fiber reinforced aluminum as in Figure 1.6 |
| Schichtverbunde | layered composite | multilayer composite |
| schichtweise | layer upon layer | or layer by layer,  hyphenated versions are also common  multi-jet & poly-jet modeling |
| schichtweiser Aufbau  schichtweise Aufbau | layer upon layer construction | layer by layer construction,  hyphenated versions are also common  (layered construction if the piece is already complete) |
| Schlagempﬁndlichkeit | impact sensitivity | impact temperature  AMP context |
| Schleifen | grinding | Machining context |
| Schlickermasse | slurry | ceramic slurry in Casting context |
| Schließringen | lock rings | Riveting context |
| schmelzbar | meltable | can be melted, can melt, possible to melt |
| Schmelze | molten mass | melt (noun) liquid state of material during casting  melt = Welding context |
| Schmelzschicht | melting layer | molten mass layer  Fused deposition modeling context |
| Schmelzschweißen | fusion welding | Welding context |
| Schmiedegesenk | forging die | forging tool, Context specific  Drop Forging context |
| Schmiedehämmern | forging hammers | Drop Forging context |
| Schmieden | forging |  |
| Schmiedestück | forged piece | forging,  *forged piece* is used within the course book rather than the more common forgings for the sake of clarity |
| Schneiddrähte | cutting wires |  |
| Schneiden | cutting | shearing  Separating (punching) context |
| Schneidenform | cutter shape | for geometrically defined cutters; not for geometrically undefined cutters  Cutting context |
| Schneidstoff | cutting material | Machining context |
| Schrumpfung | shrinkage |  |
| Schub  (auf Schub) | in shear | Bonding context |
| Schubkräfte | shear strengths | materials context |
| Schutzgas | shielding gas | inert gas  Friction stir welding context |
| Schweißen | welding | subgroup in joining context, |
| Schweißnahtgüten | weld seam quality | weld grades  Tungsten inert gas Welding context |
| Schweißstelle | welding position | welded joint  weld,  Welding context |
| Schweißverbindungen | welded joints | Welding context in aircraft assemblies |
| Schweißzone | weld zone | Fusion Welding context |
| Schwindung | shrinkage | Welding context |
| Schwingbelastung | oscillating load |  |
| Schwingungsdämpfung | vibration dampening | vibration damping  Bonding context |
| Schwingungsfestigkeit | vibration resistance | Layered composites context |
| Sekundärstruktur | secondary structure |  |
| Selektive Maskensintern (SMS) | selective mask sintering (SMS) |  |
| Selektiven Strahlschmelzen (SLM) | selective laser melting (SLM) | Selective laser sintering context |
| Selektives Lasersintern (SLS) | selective laser sintering (SLS) | Selective laser sintering context |
| Senkerodieren | die-sinking EDM | Drop Forging context |
| Seriengröße | series size |  |
| serienproduktion | series production |  |
| Setzprozess | automated process | setting process  process control,  Riveting context See Figure 2.27 |
| simultaneous engineering | simultaneous engineering | Rapid Prototyping context |
| Sintern | sintering | within primary shaping main group, along with pressing |
| SOLL-Zeiten | Target Times |  |
| Span | chip | shaving  Machining context |
| Spänen | chips | shavings  Machining context |
| Spannung | stress | confirm in context  Forming technology context |
| Spannungen | stress |  |
| Spannungsimpulsen | electrical voltage pulses | Machining context |
| Spannungsverteilung | stress distribution | stress distribution  both terms equally common in Bonding context |
| Spannvorrichtungen | tensioning device | clamping device  tension or tensioning device  Stretch-forming context |
| Spanten | frames | Aircraft assemblies context, automated riveting |
| Specialisierung | specialization | IU Nomenclature DE-EN |
| Speiser | riser |  |
| Spritzeinheit | injection unit |  |
| Spritzgang | spray pass | spraying  Coatings context |
| Spritzgusswerkzeug | injection molding tool | injection mold |
| Stanzen | punching | stamping  Separating (punching) context |
| Stanztechnik | punching technology  or simply “punching” | punching techniques, stamping techniques, stamping technology |
| starken Erweichung | severe softening |  |
| statische und dynamische Festigkeit | static and dynamic strength |  |
| Steiﬁgkeit | rigidity | materials context, stiffness in some other contexts |
| Steiﬁgkeit | rigidity | stiffness  torsion or torsional stiffness, dynamic stiffness Bonding context |
| Stelle der ON | Classification Number (CN) Position or Position of Classification Number | = Ordnungsnummer (ON) |
| Stempel | punch | stamp  Deep-drawing context |
| Stereolithograﬁe | Stereolithography | Stereolithograﬁe  AMP context |
| Steuerelektrode | bias cup | bias electrode, grid cup, control electrode  also called a Wehnelt cylinder |
| stirnseitig zusammengefügt | joined together end-to-end | joined together face-to-face |
| Stoffe | materials | substances in a few contexts |
| Stoffeigenschaftsändern | changing of material properties | changing material properties, material property modification, |
| stoffschlüssige Verbindung | material bond connection | positive material joint  Soldering context  Bonding context |
| Strahlintensitäten | beam intensities | Laser beam Welding context |
| strahlschmelzen | beam melting | laser melting  Rapid Tooling context |
| Strahlungsintervall | radiation interval | SMS context |
| Strang | filament | strand, line  fused depostion modeling context |
| Streckgrenze | yield point | materials context |
| Streckgrenze | yield point | linear Hooke's context |
| Streckziehen | stretch forming |  |
| Streckziehwerkzeuge | stretch forming tools |  |
| Stringer | stringers | Forming technology context +  Aircraft assemblies context, automated riveting |
| Stückkosten | unit costs |  |
| Stückzahlen | quantities | number of units |
| Studienskript | course book | IU Nomenclature DE-EN |
| Stützkonstruktionen | supporting structures | support structures  AMP context |
| subtraktive Fertigungsverfahren | subtractive manufacturing processes | Additive manufacturing processes context |
| subtraktive Verfahren | subtractive processes |  |
| Tapelegemaschine | tape laying machine | Layered composites context |
| Tätigkeitszeit | Activity Time |  |
| temperaturempﬁndlich | temperature-sensitive | Bonding context |
| teure Aufwendungen | costly expensives |  |
| textiler Fügetechnik | textile joining technology | Layered composites context |
| Textiltechnik | textile technology | Layered composites context |
| thermische Einwirkung | thermal effect | Welding context |
| thermische Umwandlung | thermal transformation | Riveting context See Figure 2.27 |
| thermisches Abtragen | thermal removal | thermal ablation  Machining context  item |
| thermomechanischen Behandlungen | thermomechanical treatments | CMP context |
| Thermoplast(en) | thermoplastic(s) |  |
| Thermoplast-Vorformling | thermoplastic preform |  |
| Thursday A.M. Start Joining context P. 74 |  |  |
| Tiefziehen | deep-drawing | deep drawing |
| Topfzeiten | pot life | Coatings context |
| Torsion | torsion | load condition context, Belastungszustände |
| Torsionssteiﬁgkeit | torsional rigidity | materials context, stiffness in some other contexts |
| tragende | load-bearing |  |
| tragende Hauptstruktur | load-bearing main structure |  |
| Trägflache | wings | load-bearing surface |
| Trennen | separating | As DIN Main Group, otherwise cutting. |
| Trennen | cutting |  |
| tröpfchenweise | as fine drops | dropwise  Multi-jet modeling context |
| Übergang ﬂüssig/fest | liquid to solid transition | change in material state context |
| Übergeordnete Lernziele | learning objectives | IU Nomenclature DE-EN |
| übertragbaren Scherspannungen | transmissible shear stresses | Bonding context |
| übertragen | transferred | transfer  transferred component stresses:  Riveting context Welding context |
| Umformen | forming | DIN Main Group |
| Umformverfahren | forming process |  |
| Umweltverträglichkeit | environmental compatibility | Riveting context |
| Unbeeinflussbare | Non-influenceable | Uninfluenceable also per REFA |
| Unbeeinflussbare Tätigkeitszeit | Non-Influenceable Activity Time | Uninfluencable Activity Time also per REFA |
| Unebenheiten | irregularities | uneveness  Coatings context |
| unlösbare Verbindung | permanent join | inseparable joint  riveting context in aircraft assemblies |
| Untergrund | base | substrate,  Selective beam melting context (SLM and SEBM) context |
| Untergruppe | subgroup | DIN 8580 |
| Unterkasten | Drag | (bottom-half of molding box, not flask) |
| unwirtschaftlich | uneconomical |  |
| Urformen | primary shaping | DIN Main Group  additive manufacturing processes |
| Urmodell | master pattern | rapid tooling context, |
| Vakuuminfusion | vacuum infusion | *resin infusion* context*,* See Figure 2.10  Layered composites context |
| Van-der-Waalschen-Bindung | Van der Waals bonding | Van der Waals force  Bonding context |
| Veränderungsprozess | change process |  |
| Verarbeitbarkeit | processability |  |
| Verbindungspartner | joining partners | Fusion Welding context |
| Verbrennung | combustion or burning | multi-jet & poly-jet modeling |
| Verbrennungskraftmaschine | internal combustion engine | Rapid Tooling context |
| Verbundwerkstoffe | composites | composite materials |
| Verfahren | processes | methods |
| Verfahrensablauf | process sequence | process flow |
| Verfahrenstechnik | process technology | process engineering |
| Verfestigen durch Umformen | hardening by forming | CMP context |
| Verfestigung (abbau) | hardening (reduction) | strain hardening  Forming technology context |
| Verformbarkeit | deformability | Forming technology context |
| Verformungszone | deformation zone |  |
| vergasbaren und schmelzbaren Modellmaterial | gasifiable and meltable pattern materials |  |
| verkettet | interlinked | Machining context |
| Vermehren | increase | increasing cohesion context |
| Vermindern | reduction | reducing cohesion context |
| vermischen | mixed | Fusion Welding context |
| vernetzt | crosslinked | cross-linked  AMP context |
| Vernetzung | crosslinking | cross-linking  AMP context |
| Vernetzungsmittel | crosslinking agent | 3D printing context |
| Vernetzungsmittel | curing agent | crosslinking agent |
| Versprödung | embrittlement | Fusion Welding context |
| Versprödung | embrittlement | Bonding context |
| Verteilzeit | allowance time |  |
| Vertiefung | concentration | IU Nomenclature DE-EN |
| Verzug | distortion | Friction stir welding context |
| Vollnieten | solid riveting | Riveting context |
| Volumenanteil | volume fraction | Machining content |
| Volumendifferenz | volume difference |  |
| Vorablausur (VK) | Preliminary exam | IU Nomenclature DE-EN |
| Vorderkante | leading edge | Layered composites context |
| Vorgabezeit | allowed time |  |
| vorgegebenen Abmessungen | specified measurements | or specified dimensions, depending on context |
| vorgereckte | pre-stretched | Welding context |
| vorimprägnierte Matten | pre-impregnated mats | Layered composites context |
| Vorrichtungen | jigs and tools | both terms used as a broader term, i.e., when the term *tools* is not already stated. |
| Vorrichtungen | jigs | Rapid manufacturing context |
| Vorschubbewegung | feed motion | feed movement  Friction stir welding context |
| Vorspannung (konstante) | prestress  (constant) | preload, pretensioning  Riveting context See Figure 2.27 |
| Wahlpflichtfach | elective | IU Nomenclature DE-EN |
| Wahlpflichtfach/Vertiefung/Specialisierung | elective/concentration/specialization | IU Nomenclature DE-EN |
| Walzen | rolling |  |
| wärmeaushärtende | thermosetting |  |
| Wärmebehandlungen | heat treatments | CMP context |
| Wärmeeintrag | heat input | Tungsten inert gas Welding context |
| Wärmeformbeständigkeit | heat resistance | AMP context |
| Warmfestigkeit | high thermal stability | high temperature strength |
| Warmklebstoffe | hot melt adhesive | Bonding context |
| Warmumformung | hot forming | Forming technology context |
| Wartezeit | Wait Time | Waiting Time also per REFA |
| Wege der Werkzeuge | tool paths | Riveting context |
| Weiterführende Literatur | further reading | IU Nomenclature DE-EN |
| weites | wide | Rapid Tooling context |
| Werkstoffe | materials |  |
| Werkstoffkunde | materials science |  |
| Werkstofftechnik | material technology | materials engineering  CMP context |
| Werkstücken | workpieces |  |
| Werkzeug | die | tool  Stretch forming context |
| Werkzeug | tool | die  Deep-drawing context |
| werkzeuglose | tool-free |  |
| Werkzeugmaschine | machining tool | Machining context |
| Werkzeugmaterial | tool material | Machining context |
| Werkzeugschneide | cutting edge | tool cutting edge |
| Wirkstelle | active area | effective point  heat affected zones (HAZ) infusion welding context |
| Wirtschaftlichkeit | economic efficiency | cost-effectiveness fits better in some contexts |
| wirtschaftlichkeit | economical | cost-effective fits better in some contexts |
| Wissenschaftliche Leitung / Modulverantwoertlicher (MV) | Module Director | IU Nomenclature DE-EN |
| Wissenskontrolle | knowledge check | IU Nomenclature DE-EN |
| Witterungsbeständigkeit | weather resistance | weathering resistance  AMP context |
| Work-Factor-Methode (WF) | WF – Work Factor |  |
| Zähigkeit | toughness |  |
| Zeit je Einheit | Time per Unit |  |
| Zeiteinheit | Time Unit |  |
| Zeiteinheit | time unit |  |
| zeitliche | temporal |  |
| zeitliche Belastung | temporal load | time load |
| Zeitspanvolumen | material removal rates | metal removal rates  Machining context |
| Zeitstudien | time studies |  |
| Zerspanung | machining | Cutting context |
| Zerspanungsmaschine | cutting machine | Machining context |
| Zerspanungswerkzeuges | machining tool | cutting tool  Machining context |
| Zerteilen | cutting | Separating context |
| Zerteilen | separating | Separating (punching) context |
| Zerteilen (Stanztechnik) | separating (punching technology) |  |
| Zug | tensile |  |
| Zug  (auf Zug) | in tension | Bonding context |
| Zugdruck  Zugdruckumformen | tension-pressure forming | tension-pressure  Deep-drawing context |
| Zugsteifigkeit | tensile rigidity |  |
| Zusammenhalt | cohesion | Changing of material cohesion context |
| Zusammenhalt schaffen | creating cohesion | Additive manufacturing processes context |
| Zusammenhänge | relationships | interrelationships, connections |
| zusammensetzen | compounded | Layered composites context |
| Zusatzdraht | filler wire | Laser beam welding context |
| Zusatzwerkstoff | filler | weld deposit  Soldering context |
| zweidimensionale Kraftverteilung | two-dimensional force distribution | two-dimensional distribution  Bonding context |
| Zwei-Komponenten-Kunststoff-Lacke | curable two-component plastic coatings | Coatings context |
|  |  |  |
|  |  |  |