



The **IDEAL-PARTS** library contains more than 13,000 standard fasteners, bearings, steel profiles and holes for SolidWorks. They are native, multi configuration parts with integrated SmartMates™ allowing automatic DRAG, DROP and MATE.

Standard Microsoft® Windows installation and seamless integration through the SolidWorks Design Library means CAD users, designers and engineers are instantly more productive.

The parts are modelled for efficiency and realism, displaying correctly in technical drawings, BOMs, callouts and photo-realistic renderings. PhotoView360™ materials are assigned for the creation of impressive visuals for client and in-house presentations. Also programmed are mass-properties, hatch patterns and RealView™ materials.

IDEAL-PARTS have the following advantages:

- biggest range of standard Australian metric parts
- all threads defined
- standard Microsoft® Windows installation
- accessed through the SolidWorks interface
- Correct representation of parts in 3D and in 2D
- BOM, Callout and Weldment Cut-List names
- engineering reference data included
- engineering material-properties assigned
- PhotoView360 materials assigned
- SmartMates for drag and drop
- fully customisable
- updated with every SolidWorks release
- low cost upgrades
- consistent naming conventions
- modelled accurately and robustly
- minimum file size and memory footprint

VERSION 2013

Ideal Industrial Product Design & Development
GPO Box 3494 Sydney NSW 2001
203/61 Marlborough Street, Surry Hills NSW 2010, Australia
telephone +61 2 9699 8644 facsimile +61 2 9699 8643
www.ideal-parts.com

© 1999-2013 Ideal Industrial. All rights reserved. SolidWorks® is a registered trademark of SolidWorks Corporation. Other brand or product names are trademarks or registered trademarks of their respective holders.

BALL'N ROLLER BEARINGS

These are listed by number and size in the parts list (BOM) and display correctly when sectioned in drawings. Engineering data like abutment dimensions, limiting speeds and forces are included in each of the more than 7000 part configurations eliminating the need to consult external references improving efficiency. Keys, seals and rod-ends are included for added convenience.

NUTS'N BOLTS

Features 45 metric bolts, screws, nuts, washers, pins and clips in more than 2000 commercially available sizes. Threads are represented as SolidWorks cosmetic-thread features providing accurate representation in 2D documentation. An additional 400 sheetmetal captive fasteners are included with proper call-outs. Pop-rivet shanks show the right length for the material thickness, 1800 PSM® plastic and light alloy screws, plus Eurosert® 'riv-nuts' are also included.

SHEETMETAL FASTENERS

Drag and drop these Library Features with full thread and part call-outs. Retained fasteners including PS, PF, PFH, PTSO, PBSO, TR, ARB, ARBSO, MINIARB, MINI-OFF and many more.

CHANNELS'N BEAMS

Features the full range of OneSteel® and Tubemakers® range of hot-rolled and cold-formed profiles as individual part-files and separately as Weldment features. Weldment cut lists show full name e.g. "CHS 60.3 x 2.9 C350L0 Ultrapipe"

TAP'N CLEAR

This is a collection of more than 170 metric holes from M1.6 to M36. It features tapped holes and clearance holes including countersunk and counterbored, in close, medium and free tolerances. This library is available free from our web-site.

For complete details, please visit our website or contact us at ip@ideal-industrial.com

NUTS'N BOLTS

Bolts & Screws	Socket Head Cap Screw.....SHCS
	Countersunk Head Cap Screw.....CSCS
	Button Head Socket Screw.....BHSS
	Socket Head Shoulder Screw.....SHSS
	Socket Low Head Cap Screw.....SLHCS
	Grub Screw Plain Cup.....GSC
	Grub Screw Knurled Cup.....GSK
	Hex Bolt HB.....HB
	Hex Bolt Flange-Head.....HBF
	Hex Head Set Screw.....HHSS
	Machine Screw Phillips Pan.....MSPP
	Machine Screw Phillips CSK.....MSPC
	Selftap Phillips Pan AB*.....SPP-AB
	Selftap Phillips CSK AB*.....SPC-AB
Nuts	Anchor-Sert.....AS
	Hex-Nut Plain.....HNP
	Lock-Nut.....LN
	Nyloc Nut.....NN
	Nyloc Nut Thin.....NNT
	Slotted Nut.....SN
	Castle Nut.....CN
	Dome Nut.....DN
	Wing Nut.....WN
	Flange Nut.....FN
	Pressed Nut Square.....PS
	Pressed Nut Hexagonal.....PH
	Connecting Nut.....CNN
Washers	Plain Washer.....PW
	Spring-Lock Washer.....SLW
	Internal Lock Washer.....ILW
	External Lock Washer.....ELW
	Struc.Washer Hard Tempered.....SW-HT
	Struc.Washer Sqr. Tapered 8°.....SW-ST
	Struc.Washer Coronet® Load Ind.....SW-LI
Pins	Pins Spring Pin.....SP
	Dowel Pin.....DP
	Clevis Pin*.....CLV
	Cotter Pin*.....COT
	E-Clip**.....EC
	Internal Circlip**.....ICC
	External Circlip**.....ECC
	Push-On Fixing.....POF
Blind Rivets	Plain Head.....BR
	Large Flange Head.....BR-LF
	Countersunk Head 120°.....BR-CSK-120deg

SHEETMETAL FASTENERS

Self Clinching	Nutsert.....PS
	Flush-Nutsert.....PF
	Studsert.....PFH
	Blind Standoff.....PBSO
	Through-Hole Standoff.....PTSO
	Thread-Locking Nutsert.....MINILOK
Blind	Tri-Lobe Blind-Nut.....TR
	Anchor-Sert.....AS
Anchor Rivet	ARB Series.....ARB
Bushes	ARB Self-Locking.....ASL
	ARB Tank-Type.....ARB-TANK
	ARB Miniature.....MINIARB
	ARB Standoff.....ARBSO
	ARB Miniature Standoff.....MINIOFF

EUROSERT® ANCHOR RIVET BUSHES

Eurosert 9408.....RIV-9408
Eurosert 39002.....RIV-39002
Eurosert 39006.....RIV-39006

PSM® DIRECT SCREW FIXINGS

TMA Screws	TMA Countersunk 6-Lobe.....TMA-CSK-6LO
	TMA Countersunk Philips.....TMA-CSK-PHI
	TMA Countersunk Pozi.....TMA-CSK-POZ
	TMA Pan Head 6-Lobe.....TMA-PH-6LO
	TMA Pan Head Phillips.....TMA-PH-PHI
	TMA Pan Head Pozi.....TMA-PH-POZ
TMP Screws	TMP Countersunk 6-Lobe.....TMP-CSK-6LO
	TMP Countersunk Philips.....TMP-CSK-PHI
	TMP Countersunk Pozi.....TMP-CSK-POZ
	TMP Pan Head 6-Lobe.....TMP-PH-6LO
	TMP Pan Head Phillips.....TMP-PH-PHI
	TMP Pan Head Pozi.....TMP-PH-POZ
	TMP Pan Flange Head 6-Lobe.....TMP-PF-6LO
	TMP Pan Flange Head Phillips.....TMP-PF-PHI
	TMP Pan Flange Head Pozi.....TMP-PF-POZ
TMS Screws	TMS Countersunk 6-Lobe.....TMS-CSK-6LO
	TMS Countersunk Philips.....TMS-CSK-PHI
	TMS Countersunk Pozi.....TMS-CSK-POZ
	TMS Pan Head 6-Lobe.....TMS-PH-6LO
	TMS Pan Head Phillips.....TMS-PH-PHI
	TMS Pan Head Pozi.....TMS-PH-POZ

PSM® INSERTS FOR PLASTICS

Screwsert	Screwsert.....SCT
	Headed Screwsert.....SCTH
	Screwsert Stud.....SCTS
Sonic-Lok®	Insert.....SL
	Headed Insert.....SHK
	Stud.....SLTS

NEW 2013 PSM® SONIC-LOK® INSERTS!

VERSION 2013

© 1999-2013 Ideal Industrial. All rights reserved. SolidWorks® is a registered trademark of SolidWorks Corporation. Other brand or product names are trademarks or registered trademarks of their respective holders. This table is correct at time of publication. We reserve the right to change specification or content without notice.



BALL'N ROLLER BEARINGS BALL BEARINGS

Angular-Contact-Ball-Bearings

Double-Row-Ball-Bearings

Double-Row-Self-Aligning-B.B. Miniature-Ball-Bearings

Single-Row-Ball-Bearings

Thrust-Ball-Bearings

ROLLER BEARINGS

Crossed-Roller-Bearings

Cylindrical-Roller-Bearings

Spherical-Roller-Bearings

Spherical-Roller-Thrust-Bearings Tapered-Roller-Bearings

LINEAR BEARINGS

Linear-Ball-Bearings

MISCELLANEOUS

Keys

Rod-End-Bearings

Sealing-Rings

Plain Bearings

Spherical-Bushings

CHANNELS'N BEAMS

Cold Formed

Hot Rolled

Rail Welded

open-40°.....ACBB-40
high-speed-open-15°.....HS-ACBB-15
steel-cage open.....DRBB-J-open-steel
steel-cage shielded.....DRBB-ZZ-J-shield-steel
polyamide-cage.....DRBB-TNG-open-poly
polyamide-cage shielded.....DRBB-ZZ-TNG-shield-poly
polyamide-cage sealed.....DRBB-2RS-TNG-seal-poly
open.....DRSABB-open
open shielded.....MBS-ZZ-shield
sealed.....MBS-VV-seal
flanged-open.....MBSF-flange-open
flanged-shielded.....MBSF-ZZ-flange-shield
flanged-sealed.....MBSF-VV-flange-seal
open.....SRBB-open
shielded.....SRBB-ZZ-shield
sealed.....SRBB-VV-seal
snap-groove.....SRBB-N-snap-groove
snap-ring.....SRBB-NR-snap-ring
extra-small/miniature (TAM).....TBB-S-TAM
extra-small/miniature (TG).....TBB-S-TG
single direct on flat-back.....TBB-S-F
single direction spherical-back.....TBB-S-S
single direction aligning-seat.....TBB-S-A
double direction flat-back.....TBB-D-F
double direction spherical-back.....TBB-D-S
double direction aligning-washer.....TBB-D-A

full-complement-open.....INA-SX-open
caged & full-complement-open.....IKO-CRBC-CRB-open
caged & full-complement-sealed.....IKO-CRBC-UU-CRB-UU-seal
high rigidity-open.....IKO-CRBH-open
high rigidity-sealed.....IKO-CRBH-UU-seal
slim-type.....IKO-CRBS-open
full-complement-open.....NACHI-XRN-open
single-row retain on inner.....CRB-N
single-row retain on outer.....CRB-NU
single-row retain 2 outer & 1 inner.....CRB-NJ
single-row retain 1 outer and 2 inner.....CRB-NF
single-row 2 outer, 1 inner & inner flange.....CRB-NH
single-row 1 outer, 2 inner & outer flange.....CRB-NP
single-row 2 outer, 1 inner & thrust collar.....CRB-NUP
double-row retain on inner.....CRB-NN
double-row retain on inner-taper-bore.....CRB-NN-K
double-row retain on outer.....CRB-NUU
double-row retain on outer-taper-bore.....CRB-NUU-K
plain.....SRB
oil-groove/holes.....SRB-W33-oil
plain.....SRB-K-taper
oil-groove/holes.....SRB-W33k-oil-taper
plain.....SRBT
plain-cup.....TRB
flanged-cup.....FC-TRB

compact-open.....LB-COMP-open
compact-seal.....LB-COMP-seal
light-open.....LB-LIGHT-open
light-seal.....LB-LIGHT-seal
light-segment-open.....LB-LIGHT-seg-open
light-segment-seal.....LB-LIGHT-seg-seal
heavy-open.....LB-HEAVY-open
heavy-open-lube.....LB-HEAVY-open-tube
heavy-seal.....LB-HEAVY-seal
heavy-seal-lube.....LB-HEAVY-seal-lube
heavy-split-open.....LB-HEAVY-split-open
heavy-split-open-lube.....LB-HEAVY-split-open-tube
heavy-split-seal.....LB-HEAVY-split-seal
heavy-split-seal-lube.....LB-HEAVY-split-seal-tube
heavy-segment-open.....LB-HEAVY-seg-open
heavy-segment-open-lube.....LB-HEAVY-seg-open-lube
heavy-segment-seal.....LB-HEAVY-seg-seal
heavy-segment-seal-lube.....LB-HEAVY-seg-seal-lube

Key-Parallel round-round.....KEY-PAR-A
Key-Parallel flat-flat.....KEY-PAR-B
Key-Parallel flat-round.....KEY-PAR-C
Key-Taper round-round.....KEY-TAPER-A
Key-Taper flat-flat.....KEY-TAPER-B
Key-Gib-Head.....KEY-GIB
Key-Woodruff.....WOODRUFF
male.....RE-M
female.....RE-F
Single-Lip.....Sealing-Ring-Single-Lip-G
Double-Lip.....Sealing-Ring-Double-Lip-SD
Radial Spherical Plain Bearing open.....RSPB-GE
Radial Spherical Plain Bearing sealed.....RSPB-GE-2RS
Radial Spherical Plain Bearing wide open.....RSPB-GE-FW
Radial Spherical Plain Bearing wide sealed.....RSPB-GE-FW-2RS
Pilloball Spherical Bushing.....SB

Structural Washers	Hardened Tempered.....SW-HT
	Square Tapered 8°.....SW-ST
	Coronet® Load Indicator.....SW

TAP'N CLEAR

Clearance Holes	SHCS-C' bore - close fit.....CB-Mx-C
	SHCS-C' bore - medium fit.....CB-Mx-M
	SHCS-C' bore - free fit.....CB-Mx-F
	Countersink - close fit.....CSK-Mx-C
	Countersink - medium fit.....CSK-Mx-M
	Countersink - free fit.....CSK-Mx-F
	Clearance Hole - close fit.....CLR-Mx-C
	Clearance Hole - medium fit.....CLR-Mx-M
	Clearance Hole - loose fit.....CLR-Mx-F
Tapped Holes	Blind Hole - Tapped.....TB-Mx
	Through Hole - Partially tapped.....TP-Mx
	Through Hole - Through tapped.....TT-Mx