

ENSURING PERFORMANCE THROUGH PROPER INSTALLATION AND REMOVAL OF BEARINGS

INSTALLATION TOOLS

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INSTALLATION TOOLS

Timken offers a large assortment of high-quality induction heaters designed for demanding industrial applications. They can heat and radially expand a wide variety of gears, rings, couplings, bearings and other components. All heaters are produced in accordance with International (IEC) and European (CE) health and safety requirements. They feature a microprocessor controlled power supply, automated time and temperature control and automatic demagnetization.

WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical.

Failure to follow user manual can result in equipment failure, creating a risk of serious bodily harm.

Do not operate an induction heater in areas where there is a risk of an explosion.



DO NOT WEAR METAL OBJECTS OR WATCHES.



PROHIBITED FOR PEOPLE WITH A PACEMAKER AND/OR HEARING AID.



READTHE INSTRUCTIONS.



PROTECTIVE GLOVES.

ACAUTION

Failure to observe the following cautions could create a risk of injury.

See inside text for additional warnings.

INDUCTION HEATERS

Why Choose an Induction Heater?

Induction heating is a superior, fast and controlled heating method. It is a safer and more environmentally friendly alternative to traditional heating methods such as ovens, oil baths or blow torches. These methods cause fumes or oil waste and are not recommended for personal health and safety.

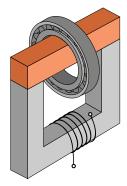
Timken® induction heaters use the principle of induction, similar to a transformer. The heater and yokes remain cool; only the work piece is heated. During the induction heating cycle, a certain degree of magnetism occurs. All Timken heaters demagnetize automatically after each heating cycle.

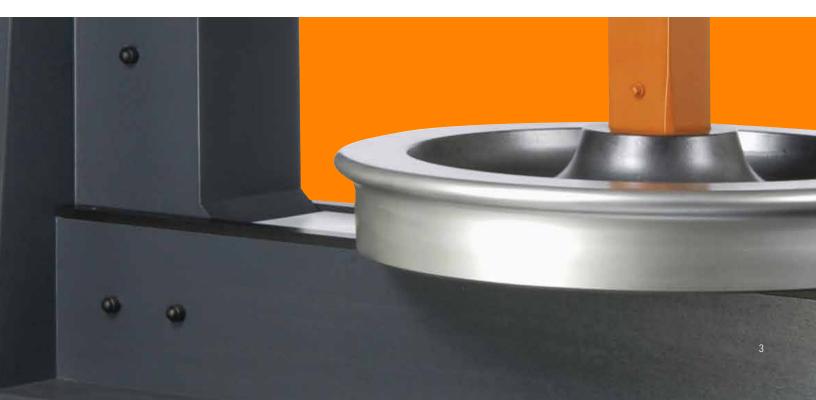
Versatility, Safety and Quality

Timken induction heaters can be used for heating gear wheels, bushings, couplings and other components. Proper mounting may lengthen the life span of your equipment, and controlled induction heating helps to prevent unnecessary damage.

Digital electronics provide optimum control during the heating process and automatically select the most efficient power supply to help ensure balanced and fast heating.

High-quality induction heaters designed for demanding industrial applications.





VHIN-10



Portable model suitable for on-site jobs

Heating Capacity, 20 kg (44 lbs.) (Max. Bearing Weight) Voltages available: 120V/10A, 230V/10A, 240V/5A

Min. Bore: 10 mm (0.39 in.) Max. 0.D.: 240 mm (15.8 in.) Max. Width: 120mm (4.7 in.) Max. Weight: 20 kg (44 lbs.)

VHIN-35



Bench-top model suitable for on-site jobs

Heating Capacity, 50 kg (110.2 lbs.) (Max. Bearing Weight) Voltages available: 120V/13A, 230V/13A

Min. Bore: 10 mm (0.39 in.) Max. 0.D.: 400 mm (15.8 in.) Max. Width: 120mm (4.7 in.) Max. Weight: 50 kg (110.2 lbs.)

VHIS-75



Bench-top model with swing arm

Heating Capacity, 100 kg (220.5 lbs.) (Max. Bearing Weight) Voltages available: 120V/15A, 230V/16A

Min. Bore: 30 mm (1.2 in.) Max. 0.D.: 500 mm (19.7 in.) Max. Width: 180 mm (7.1 in.) Max. Weight: 100 kg (220.5 lbs.)

VHIS-100



Bench-top model with swing arm

Heating Capacity, 150 kg (330.7 lbs.) (Max. Bearing Weight) Voltages available: 230V/16A

Min. Bore: 45 mm (1.8 in.) Max. O.D.: 600 mm (23.6 in.) Max. Width: 210 mm (8.3in.) Max. Weight: 150 kg (330.7 lbs.)

VHIS-150



Bench-top model with swing arm

Heating Capacity, 200 kg (440.9 lbs.) (Max. Bearing Weight) Voltages available: 400V/20A, 500V/16A, 600V/14A

Min. Bore: 45 mm (1.8 in.) Max. O.D.: 600 mm (23.6 in.) Max. Width: 210 mm (8.3 in.) Max. Weight: 200 kg (440.9 lbs.)

VHIS-200



Mobile, medium capacity with swing arm

Heating Capacity, 400 kg (881.8 lbs.) (Max. Bearing Weight) Voltages available: 400V/30A, 500V/24A

Min. Bore: 30 mm (1.2 in.) Max. O.D.: 850 mm (33.5 in.) Max. Width: 320 mm (12.6 in.) Max. Weight: 400 kg (881.8lbs.)

VHIS-400



Powerful, mobile model with swing arm

Heating Capacity, 600 kg (1322.7 lbs.) (Max. Bearing Weight) Voltages available: 400V/45A, 500V/36A

Min. Bore: 60 mm (2.4 in.) Max. O.D.: 1050 mm (41.3 in.) Max. Width: 400 mm (15.7 in.) Max. Weight: 600 kg (1322.7 lbs.)

VHIN-600



Heavy-duty model for heavy bearings

Heating Capacity, 800 kg (1763.7 lbs.) (Max. Bearing Weight) Voltages available: 400V/60A, 500V/48A

Min. Bore: 260 mm (10.2 in.) Max. O.D.: 1150 mm (45.3 in.) Max. Width: 430 mm (16.9 in.) Max. Weight: 800 kg (1763.7 lbs.)

VHIN-800



Powerful heater for heavy bearings

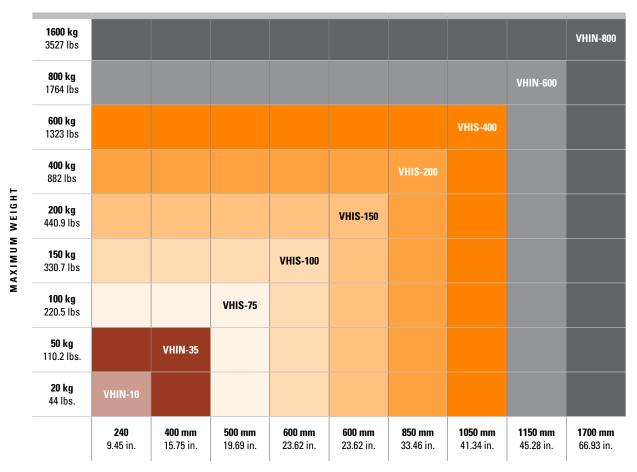
Heating Capacity, 1600 kg (3527.3 lbs.) (Max. Bearing Weight) Voltages available: 400V/100A, 500V/80A

Min. Bore: 330 mm (12.9 in.) Max. O.D.: 1700 mm (66.9 in.) Max. Width: 710 mm (27.9 in.) Max. Weight: 1600 kg (3527.3 lbs.)

| ECHNICAL DATA | VHI | N-10 | VHII | N-35 | VHI | S-75 | VHIS | S-100 | |
|-----------------------------------|----------|--------------------------------|---------|--------------------|---------|--------------------|-------------|----------|--|
| ELECTRICITY | | | | | | | | | |
| Standard power 230V | 2.3 kVA | / 1.2 kVA | 3.0 | kVA | 3.6 | kVA | 3.7 | kVA | |
| Optional power 120V | 1.2 | kVA | 1.5kVA | | 1.8 kVA | | | - | |
| Voltage/Amp standard | | 120V/10A, 230V/10A, 240V/5A | | 120V/13A, 230V/13A | | 120V/15A, 230V/16A | | 230V/16A | |
| Frequency Hz | 50 | /60 | 50, | /60 | 50, | /60 | 50, | /60 | |
| Yokes, standard, mm / set 1 | 7, 10, 1 | 4, 20, 40 | 7, 14, | 40x50 | 20, | , 50 | 30,7 | 0x80 | |
| Yokes, option | | - | | - | | - | | - | |
| Swivel arm | N | lo | N | 0 | Yo | es | Y | es | |
| WORK PIECE | | | | | | | | | |
| Max. workpiece weight kg (±) | 2 | 20 | 5 | 0 | 10 | 00 | 1! | 50 | |
| Min. ID Ø mm, vertical/horizontal | 1 | 0 | 10, | 65 | 30, | /72 | 45/ | 110 | |
| Max. O.D. mm | 2 | 40 | 400 | | 500 | | 600 | | |
| Max. width mm | 1 | 120 | | 120 | | 180 | | 10 | |
| POLE DIMENSIONS | | | | | | | | | |
| Pole height mm | 1: | 35 | 130 | | 185 | | 20 | 05 | |
| Pole diameter mm | 40 | x40 | 40x50 | | 50x50 | | 70: | x80 | |
| CONTROLS | G2 | _ | G2 | G3 | G2 | G3 | G2 | G3 | |
| Display | Diç | jital | Digital | Touch | Digital | Touch | Digital | Touc | |
| Log function | N | lo | No | Yes | No | Yes | No | Yes | |
| Magnetic probe | | 1 | 1 | 2 | 1 | 2 | 1 | 2 | |
| Delta-T ΔT | N | lo | No | Yes | No | Yes | No | Yes | |
| Temperature and speed control | N | lo | No | Yes | No | Yes | No | Yes | |
| Temperature control | Y | es | Ye | es | Ye | es | Yo | es | |
| Time control | Y | es | Ye | es | Ye | es | Yo | es | |
| Max. temperature °C / °F | 150 °C | / 302 °F | 240 °C | / 464 °F | 240 °C | / 464 °F | 240 °C | / 464 °F | |
| Max. time range | 0-30 | min. | 0-99 | min. | 0-99 | min. | 0-99 | min. | |
| Aut. demagnetising, <2A/cm | Y | es | Ye | es | Ye | es | Yo | es | |
| Support for horizontal heating | N | lo | Ye | es | Ye | es | Ye | es | |
| UNIT DIMENSIONS | | | | | | | | | |
| Dimensions mm (L x W x H) | 460x2 | 40x280 | 600x22 | 26x272 | 702x2 | 56x392 | 788x315x456 | | |
| Dimensions inch (L x W x H) | 18x1x | 9.4x11 | 23.6x8 | .9x10.7 | 27.6x10 |).1x15.4 | 31x12.4x18 | | |

| VHIS | S-150 | VHIS-200 | | VHIS | 6-400 | VHIN | I-600 | VHIN-800 | | |
|--------------|--------------------|--------------------|----------|--------------|--------------|--------------------|----------|----------------|------------|--|
| | | | | | | | | | | |
| 8.0 kVA, 7.7 | kVA, 8.4 kVA | 12 k | :VA | 18 | «VΑ | 24 | «VΑ | 40 | «VΑ | |
| | - | - | | | - | - | | | - | |
| | 500V/16A, //14A | 400V/30A, 500V/24A | | 400V/45A, | 500V/36A | 400V/60A, 500V/48A | | 400V/100A | , 500V/80A | |
| 50, | /60 | 50/ | 60 | 50/60 | | 50, | /60 | 50, | /60 | |
| 30,7 | 0x80 | 80x80 |)x500 | 90x90 | 0x600 | 100x100x725 | | 150x15 | 0x1140 | |
| | - | 20, 30, | 40,60 | 40,6 | 0,80 | 40, 60, 80 | | 60, 80 | 0, 100 | |
| Ye | es | Υe | es | Yo | es | N | 0 | N | lo | |
| | | | | | | | | | | |
| 20 | 00 | 40 | 00 | 60 | 00 | 80 | 00 | 16 | 00 | |
| 45/ | 110 | 30/ | 135 | 60/ | 150 | 260 | /60 | 330 | /90 | |
| 60 | 00 | 85 | 50 | 10 | 50 | 1150 | | 1700 | | |
| 2 | 210 | | 320 | | 00 | 43 | 30 | 7 | 10 | |
| | | | | | | | | | | |
| 20 | 05 | 305 | | 3 | 15 | 515 | | 78 | 30 | |
| 70: | x80 | 80x100 | | 90x | 90x110 | | 180x180 | | 230x230 | |
| G2 | G3 | G2 | G3 | G2 | G3 | G2 | G3 | G2 | G3 | |
| Digital | Touch | Digital | Touch | Digital | Touch | Digital | Touch | Digital | Touch | |
| No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | |
| 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | |
| No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | |
| No | Yes | No | Yes | No | Yes | No | Yes | No | Yes | |
| Ye | es | Ye | es | Ye | es | Ye | es | Ye | es | |
| Ye | es | Ye | es | Ye | es | Ye | es | Ye | es | |
| 240 °C | / 464 °F | 240 °C / | ′ 464 °F | 240 °C | / 464 °F | 240 °C | / 464 °F | 240 °C | / 464 °F | |
| 0-99 | min. | 0-99 | min. | 0-99 | min. | 0-99 | min. | 0-99 | min. | |
| Ye | es | Ye | es | Ye | Yes | | Yes | | Yes | |
| Ye | es | Υe | es | Yes | | Yes | | Yes | | |
| | | | | | | | | | | |
| 788x3 | 15x456 | 1214x5 | 60x990 | 1344x560x990 | | 1080x6 | 50x955 | 1520x750x1415 | | |
| 31x12 | 2.4x18 | 47.8x2 | 22x39 | 52.9x | 22x39 | 42.5x25.6x37.6 | | 59.8x29.5x55.7 | | |

INDUCTION HEATER SELECTION GUIDE USING WEIGHT AND O.D.



MAXIMUM O.D. SIZE

The size and weight of your product are two of the many factors that determine which heater is right for your equipment. This chart is offered as a general guide only.

INDUCTION HEATERS

ACCESSORIES

GLOVES



Heat resistant to 150° C (302° F).

SUPPLEMENTARY YOKES



Available for various models.

SPARE TEMPERATURE PROBES



Each Timken induction
heater model is
supplied with
a magnetic
temperature probe.
A clamp also
is available
for nonferrous
components.

PART NUMBERS

Yoke

Yoke

Yoke Yoke VHIY-50X50X350 VHIY-60X60X350

VHIY-70X70X350

VHIY-70X80X350

| VHIN 10 | | VHIS 150 | | VHIN 800 | |
|----------|---------------------|----------|--|----------------|-----------------------------|
| Heater | VHIN-G2-10-230VEU | Heater | VHIS-G2-150-600VUS | Heater | VHIN-G2-800-400VEU |
| Heater | VHIN-G2-10-230VUS | Heater | VHIS-G2-150-500VUS | Heater | VHIN-G2-800-500VUS |
| Heater | VHIN-G2-10-230VGB | | VHIS-G2-150-500VUS VHIS-G2-150-400VEU | | |
| | | Heater | | Heater | VHIN-G3-800-400VEU |
| Heater | VHIN-G2-10-120VUS | Heater | VHIS-G2-150-500VEU | Heater | VHIN-G3-800-500VUS |
| Yoke | VHIY-7X7X200 | Heater | VHIS-G3-150-600VUS | Yoke | VHIY-60X60X1140 |
| Yoke | VHIY-10X10X200 | Heater | VHIS-G3-150-500VUS | Yoke | VHIY-80X80X1140 |
| Yoke | VHIY-14X14X200 | Heater | VHIS-G3-150-400VEU | Yoke | VHIY-100X100X1140 |
| Yoke | VHIY-20X20X200 | Heater | VHIS-G3-150-500VEU | Yoke | VHIY-150X150X1140 |
| Yoke | VHIY-40X40X200 | Yoke | VHIY-10X10X350 | | |
| Yoke | VHIY-40X50X200 | Yoke | VHIY-14X14X350 | ACCESSORIE | S |
| | | Yoke | VHIY-20X20X350 | Temp Probe VI | HA100001-Temp Probe |
| VHIN 35 | | Yoke | VHIY-30X30X350 | 240C/464F - S | mall |
| Heater | VHIN-G2-35-230VEU | Yoke | VHIY-40X40X350 | Temp Probe VI | HA100014-Temp Probe |
| Heater | VHIN-G2-35-230VGB | Yoke | VHIY-50X50X350 | 350C/662F - S | |
| Heater | VHIN-G2-35-230VUS | Yoke | VHIY-60X60X350 | Gloves VHIA10 | 10020-Heat Resistant Gloves |
| Heater | VHIN-G2-35-120VUS | Yoke | VHIY-70X70X350 | Temp Probe VI | HA100015-Temp Probe |
| Heater | VHIN-G3-35-230VEU | Yoke | VHIY-70X80X350 | 240C/464F - La | · |
| Heater | VHIN-G3-35-230VUS | | | , | 9- |
| Heater | VHIN-G3-35-120VUS | VHIS 200 | | | |
| Heater | VHIN-G3-35-230VGB | Heater | VHIS-G2-200-400VEU | | |
| Yoke | VHIY-7X7X200 | Heater | VHIS-G2-200-500VEU | | |
| Yoke | VHIY-10X10X200 | Heater | VHIS-G2-200-500VUS | | |
| Yoke | VHIY-14X14X200 | Heater | VHIS-G3-200-400VEU | | |
| Yoke | VHIY-20X20X200 | Heater | VHIS-G3-200-400VEU | | |
| Yoke | VHIY-40X40X200 | | VHIS-G3-200-500VL0 | | |
| Yoke | | Heater | | | |
| ruke | VHIY-40X50X200 | Yoke | VHIY-20X20X500 | | |
| VIII0 75 | | Yoke | VHIY-30X30X500 | | |
| VHIS 75 | VIII0 00 75 000V511 | Yoke | VHIY-40X40X500 | | |
| Heater | VHIS-G2-75-230VEU | Yoke | VHIY-60X60X500 | | |
| Heater | VHIS-G2-75-230VGB | Yoke | VHIY-80X80X500 | | |
| Heater | VHIS-G2-75-230VUS | | | | |
| Heater | VHIS-G2-75-120VUS | VHIS 400 | \### OO 400 400\#F# | | |
| Heater | VHIS-G3-75-230VEU | Heater | VHIS-G2-400-400VEU | | |
| Heater | VHIS-G3-75-230VUS | Heater | VHIS-G2-400-500VUS | | |
| Heater | VHIS-G3-75-120VUS | Heater | VHIS-G3-400-400VEU | | |
| Yoke | VHIY-10X10X280 | Heater | VHIS-G3-400-500VUS | | |
| Yoke | VHIY-14X14X280 | Yoke | VHIY-40X40X600 | | |
| Yoke | VHIY-20X20X280 | Yoke | VHIY-60X60X600 | | |
| Yoke | VHIY-30X30X280 | Yoke | VHIY-80X80X600 | | |
| Yoke | VHIY-40X40X280 | Yoke | VHIY-90X90X600 | | |
| Yoke | VHIY-50X50X280 | | | | |
| Yoke | VHIY-60X60X280 | VHIN 600 | | | |
| | | Heater | VHIN-G2-600-400VEU | | |
| VHIS 100 | | Heater | VHIN-G2-600-500VEU | | |
| Heater | VHIS-G2-100-230VEU | Heater | VHIN-G2-600-500VUS | | |
| Heater | VHIS-G2-100-230VUS | Heater | VHIN-G3-600-400VEU | | |
| Heater | VHIS-G2-100-230VGB | Heater | VHIN-G3-600-500VEU | | |
| Heater | VHIS-G3-100-230VEU | Heater | VHIN-G3-600-500VUS | | |
| Heater | VHIS-G3-100-230VUS | Yoke | VHIY-40X40X725 | | |
| Heater | VHIS-G3-100-230VGB | Yoke | VHIY-50X50X725 | | |
| Yoke | VHIY-10X10X350 | Yoke | VHIY-60X60X725 | | |
| Yoke | VHIY-14X14X350 | Yoke | VHIY-80X80X725 | | |
| Yoke | VHIY-20X20X350 | Yoke | VHIY-100X100X725 | | |
| Yoke | VHIY-30X30X350 | 1010 | VIII 100/(100/(720 | | |
| Yoke | VHIY-40X40X350 | | | | |
| Voko | VHIV-50X50X350 | | | | |

IMPACT FITTING TOOL

Mounting

Proper mounting is essential to ensure long bearing life. Designed to permit the safe, precise and quick mounting of bearings, bushings, sealing rings, cam wheels and pulleys, the Timken impact fitting tool set features impact-resistant plastic collets. These help deter metal-to-metal contact and the resulting shaft damage.

During the mounting of bearings where the faces lie in the same plane, the collets enable the load to be transmitted to the ring experiencing the interference fit. If the impact mounting tool is used, mounting forces are not transmitted via the rolling elements and damage to the raceways is avoided.









- 33 collets ranging from 10 mm to 110 mm
- Three sleeves
- One impact hammer
- Case size: 16.9 in. x 12.6 in. x 4.0 in.



VIFT3300

Warning Information for Impact Fitting Tool

See additional warnings on page 2.

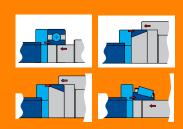
- When operating the impact fitting tool, wear protective clothing, including safety shoes, protective glasses, gloves and helmet.
- Do not use the collets to mount components that have temperatures greater than 80° C (176° F).
- Never mount the cup and cone of a tapered bearing together and never mount a cone from the front face.



Care should be taken when mounting tapered roller bearings. The cup can be mounted in either direction, but the cone can only be mounted from the back face. This ensures that the cage does not overhang. Never mount a cup and cone together and never mount a cone from the front face. This will avoid damage to the cage and raceways, which could lead to failure, and a risk of damage to the equipment and death or serious injury.



Proper mounting allows the load to be transmitted to the ring experiencing the interference fit. Mounting forces are not transmitted via the rolling elements, helping to prevent damage to the raceways.



IMPACT FITTING TOOL SELECTION GUIDE

| SLEEVE | RING | ALL ISO BEARING CODES ENDING WITH | 60, 62 63, 64 | 12, 22 13, 23 | 70, 72B 73B | 32, 33 | 222, 213 223 | NU, NJ N 2 3 4 | 302, 322 303, 330 | 320, 313 323, 332 |
|--------------|-------------------------|---|--|--|----------------|----------------------|----------------------------------|----------------------------|----------------------|---------------------------|
| | 10-26 10-30 | 000 200 | 6000 6200 2200 | 129 1200 | 7000 | 3200 | | | | |
| | 10-35 12-28 12-32 | 300 001 201 | 6300 6001 6201 | 1300 1201 | 7300 | 3201 | | | | |
| | 12-37 | 301 | 2201 6301 2301 | 1301 | 7301 | | | | | |
| A 1 | 15-32 15-35 | 002 202 | 6002 6202 2202 | 1202 | 7202B | 3202 | | | | |
| | 15-42 | 302 | 6302 2302 | 1302 | | 3302 | | | 30302 | |
| | 17-35 | 003 | 6003 16003 | | | | | | | |
| | 17-40 | 203 | 6203 2203 | 1203 | 7203B | 3203 | | | 30203 | |
| | 17-47 | 303 | 6303 2303 | 1303 | 7303B | 3303 | | | 30303 | 32303 |
| | 20-42 20-47 | 004 204 | 6004 6204 2204 | 1204 | 7004 7204B | 3204 | | 204 | 30204 | 32004 |
| | 20-52 | 304 403 | 6304 6403 | 1304 2304 | 7304B | 3304 | 21304 | 304 | 30304 | 32304 |
| Do. | 25-47 25-52 | 005 205 | 6005 6205 | 1205 | 7005 7205B | 3205 | 22205 | 205 32205 | 30205 | 32005 33205 |
| B2 | 25-62 | 305 404 | 2205 6305 6404 | 1305 2305 | 7305B | 3305 | 21305 | 305 | 30305 | 31305 32305 |
| | 30-55 000 | 006 206 | 6006 6206 | 1206 | 7206B | 3206 | 22206 | 206 | 30206 | 32006 33206 |
| | 30-72 | 306 405 | 2206 6306 6405 | 1306 2206 | 7306B | 3306 | 21306 | 32206 306 405 | 30306 | 31306 32306 |
| | 35-62 35-72 | 007 207 | 6007 6207 | 1207 | 7007 7207B | 3207 | 22207 | 207 32207 307 406 | 30207 | 32007 33207 |
| | 35-80 | 307 406 | 2207 6307 6406 | 1307 2307 | 7307B | 3307 | 21307 | | 30307 | 31307 32307 |
| | 40-68 40-80 | 008 208 | 6006 6208 | 1208 | 7208B | 3208 | 22208 | 208 | 30208 | 32008 33208 |
| C3 | 40-90 | 308 407 | 6308 6407 | 1308 2308 | 7308B | 3308 | 21308 22308 | 32208 308 407 | 30308 | 31308 32308 |
| | 45-75 45-85 | 009 209 | 6009 6209 | 1209 | 7209B | 3209 | 22209 | 209 | 32009 30209 | 33209 |
| | 45-100 | 309 | 2209 6309 | 1309 | 7309B | 3309 | 21309 | 32209 309 | 30309 | 31309 |
| | 50-80 50-90 | 408 010 210 | 6408 6010 6210 | 2309 1210 | 7210B | 3210 | 22309 22210 | 408 210 | 33010 30210 | 32309 32010 33210 |
| | 50-110 | 310 409 | 2210 6310 6409 | 1310 2310 | 7310B | 3310 | 21310 22310 | 32210 310 409 | JM205149/JN 30310 | M205110 31310 32310 |
| | | gs 50-90, 45-100 | | fit the following | g bearing wher | e only the oute | er ring is to be | fitted, e.g., sha | ft not installed. | |
| | 50-90 | | 6011 6012 | 4044 | 70445 | 0044 | 00044 | 044 | | |
| 00 | 45-100 60 62 | 6013 6211 | 1211 2211 | 7211B 7212B | 3211 | 22211 | 211 | | | |
| C3 50 | 50-110 | | 6014 6015 6212 6213 6311 6410 | 1212 1213 2213 2213 1311 2311 | 7213B | 3212 3213 3211 | 22212 22213 21311 22311 | 212 213 311 410 | | |

HYDRAULIC & SELF-CENTERING HYDRAULIC PULLERS

Timken carries a wide range of self-contained portable hydraulic and mechanical pulling systems that have capacities from four to 30 tons. They are ideal for removing all kinds of shaft-fitted parts.

Advantages

- Self-centering pullers avoid damage to parts as the applied force is distributed evenly. Integrated pump, cylinder, hose and puller with safety-release valve.
- Compact design: The self-contained hydraulic pump and puller saves space.
- Sets are supplied in a handy carrying case.
- Multi-purpose: Ideal for pulling a wide variety of press-fit parts including bearings, wheels, bushings, gears and pulleys.
- The pump handle rotates 360-degrees, enabling users to pull from the most convenient position.
- Pullers can be used with two or three legs.
- Available with accessories.

Warning Information for Pullers

See additional warnings on page 2.

- Check condition of puller before use.
- Exchange for new parts, any parts having indications of wear and tear, such as ground down parts, overloaded parts or worn-out parts.
- Do not use a hammer when operating spindle.
- If any indications of overload, stiff working, etc., occur during pulling, stop the procedure at once. Try to use a larger or different type of puller if necessary.
- For proper puller engagement, the jaws/legs must be centered.
- When pulling, make sure puller and pulled parts are kept covered by the safety blanket to provide protection from injury caused by flying fragments from broken parts.
- When operating the puller, wear protective clothing, including safety shoes, protective glasses, gloves and helmet.
- Keep spindle and puller body clean and oiled.
- Avoid puller overload, as it can result in breakage of the puller's arms and/or beam. This breakage can cause damage to the puller, shaft and bearing as well as death or serious personal injury.



Self-Centering Hydraulic Pullers

The same power as our standard models, but with the added convenience of hand operation. No more fumbling to engage the puller to the part. Self-centering makes pulling shaft-fitting parts easy. Self-centering hydraulic pullers come preassembled.

SELF-CENTERING HYDRAULIC PULLERS

| MODEL | MAX. WITHDRAWAL FORCE | ARM LENGTH | WIDTH OF GRIP | STROKE WIDTH | A | В | С | D | E | F | G | WEIGHT |
|--------|-----------------------------|----------------------|----------------------|---------------------|--------------------|----------------------|----------------------|---|--------------------|--------------------|--------------------|--------------------|
| VHPS4 | 4 t | 190 mm (7.48 in.) | 315 mm (12.4 in.) | 60 mm (2.4 in.) | 13 mm (0.5 in.) | 10 mm (0.4 in.) | 22 mm (0.9 in.) | | 40 mm (1.6 in.) | 42 mm (1.7 in.) | 22 mm (0.9 in.) | 8 kg (18 lbs.) |
| VHPS6A | 6 t | 230 mm (9.1 in.) | 390 mm (15.4 in.) | 70 mm (3.4 in.) | 13 mm (0.5 in.) | 10 mm (0.4 in.) | 22 mm (0.9 in.) | | 50 mm (2 in.) | 45 mm (1.8 in.) | 23 mm (0.9 in.) | 10 kg (22 lbs.) |
| VHPS8 | 8 t | 280 mm (11 in.) | 460 mm (18.1 in.) | 85 mm (3.4 in.) | 13 mm (0.5 in.) | 13 mm (0.5 in.) | 27.5 mm (1.1 in.) | | 70 mm (2.7 in.) | 50 mm (2 in.) | 25 mm (1 in.) | 12 kg (26 lbs.) |
| VHPS12 | 12 t | 300 mm (11.8 in.) | 515 mm (20.3 in.) | 85 mm (3.4 in.) | 15 mm (0.6 in.) | 16.5 mm (0.7 in.) | 29 mm (1.1 in.) | | 70 mm (2.7 in.) | 60 mm (2.4 in.) | 28 mm (1.1 in.) | 15 kg (33 lbs.) |
| VHPS20 | 20 t | 325 mm (12.8 in.) | 520 mm (20.5 in.) | 111 mm (4.4 in.) | 20 mm (0.8 in.) | 27 mm (1.1 in.) | 33 mm (1.3 in.) | | 62 mm (2.4 in.) | 80 mm (3.2 in.) | 40 mm (1.6 in.) | 25 kg (55 lbs.) |
| VHPS30 | 30 t | 415 mm (16.3 in.) | 620 mm (24.4 in.) | 111 mm (4.4 in.) | 20 mm (0.8 in.) | 27 mm (1.1 in.) | 38 mm (1.5 in.) | | 85 mm (3.3 in.) | 98 mm (3.9 in.) | 50 mm (2 in.) | 36 kg (80 lbs.) |

HYDRAULIC PULLERS

| MODEL | MAX. WITHDRAWAL FORCE | 1 | 2 | 3 | A | В | С | D | E | F | G | WEIGHT |
|--------|-----------------------------|----------------------|----------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|-----------------------|
| VHPT4 | 4 t | 185 mm (7.3 in.) | 255 mm (10.0 in.) | 60 mm (2.4 in.) | 11 mm (0.4 in.) | 6 mm (0.2 in.) | 22 mm (0.9 in.) | 32 mm (1.3 in.) | 84 mm (3.3 in.) | 42 mm (1.7 in.) | 22 mm (0.9 in.) | 4.5 kg (9.9 lbs.) |
| VHPT6A | 8 t | 220 mm (8.7 in.) | 330 mm (13.0 in.) | 70 mm (2.8 in.) | 13 mm (0.5 in.) | 10 mm (0.4 in.) | 25 mm (1.0 in.) | 51 mm (2.0 in.) | 122 mm (4.8 in.) | 65 mm (2.6 in.) | 25 mm (1.0 in.) | 6.5 kg (14.3 lbs.) |
| VHPT8 | 8 t | 230 mm (9.1 in.) | 350 mm (13.8 in.) | 85 mm (3.4 in.) | 11 mm (0.4 in.) | 10 mm (0.4 in.) | 25 mm (1.0 in.) | 51 mm (2.0 in.) | 122 mm (4.8 in.) | 50 mm (2.0 in.) | 25 mm (1.0 in.) | 6.5 kg (14.3 lbs.) |
| VHPT12 | 12 t | 270 mm (10.6 in.) | 375 mm (14.8 in.) | 85 mm (3.4 in.) | 14 mm (0.6 in.) | 10 mm (0.4 in.) | 29 mm (1.1 in.) | 51 mm (2.0 in.) | 118 mm (4.6 in.) | 60 mm (2.4 in.) | 28 mm (1.1 in.) | 8 kg (17.6 lbs.) |
| VHPT20 | 20 t | 360 mm (14.2 in.) | 520 mm (20.5 in.) | 111 mm (4.4 in.) | 20 mm (0.8 in.) | 27 mm (1.1 in.) | 33 mm (1.3 in.) | 60 mm (2.4 in.) | 161 mm (6.3 in.) | 80 mm (3.2 in.) | 40 mm (1.6 in.) | 22 kg (48.5 lbs.) |
| VHPT30 | 30 t | 360 mm (14.2 in.) | 550 mm (21.7 in.) | 111 mm (4.4 in.) | 20 mm (0.8 in.) | 27 mm (1.1 in.) | 38 mm (1.5 in.) | 60 mm (2.4 in.) | 155 mm (6.1 in.) | 98 mm (3.9 in.) | 50 mm (2.0 in.) | 32 kg (70.6 lbs.) |

FITS BOTH SELF-CENTERING AND STANDARD HYDRAULIC PULLERS.

SPLITTER ACCESSORY SETS (HYDRAULIC PUMP NOT INCLUDED)

| | | | | | , | |
|-----------|--------|-------------------|-------------------|-----------------|-------------------|---------------------|
| | PULLER | ARM LENGTH | WIDTH OF GRIP | MIN. O.D. | MAX. 0.D. | WEIGHT |
| VHPT490* | VHPT4 | 250 mm (9.8 in.) | 110 mm (4.3 in.) | 25 mm (1.0 in.) | 110 mm (4.3 in.) | 6.5 kg (14.3 lbs.) |
| VHPT690A* | VHPT6 | 270 mm (10.6 in.) | 220 mm (8.7 in.) | 50 mm (2.0 in.) | 180 mm (7.1 in.) | 8.5 kg (18.7 lbs.) |
| VHPT890* | VHPT8 | 270 mm (10.6 in.) | 210 mm (8.3 in.) | 50 mm (2.0 in.) | 220 mm (8.7 in.) | 5.5 kg (21.1 lbs.) |
| VHPT1290* | VHPT12 | 380 mm (15.0 in.) | 290 mm (11.4 in.) | 80 mm (3.2 in.) | 290 mm (11.4 in.) | 13.0 kg (28.7 lbs.) |

^{*} Will work with VHPT/VHIS series.

MECHANICAL PULLERS

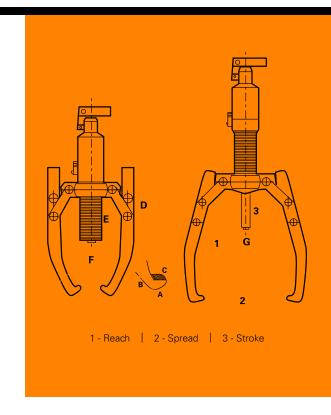
After the required type of puller has been identified, it is easy to choose the most suitable model from the series listed in the catalog.

Please note that understanding the work space and possibility of gripping will ensure proper fit of grip.

Compare size and measurement of the part to be removed to the values indicated in the table (below) to choose the suitable puller. The choice of mechanical puller depends also on required pulling force.

The most important factor is safety: always choose a larger or stronger puller. Three-arm pullers better distribute the pulling force than two-arm devices; therefore, if there is enough space, three-arm pullers should be the first choice.

For safety purposes and service life of the puller, never exceed the maximum capacity. The capacity data has been determined for new pullers. Normal wear and tear in practice and damage may decrease these figures.



MECHANICAL PULLERS

| MODEL | MAX. WITHDRAWAL FORCE | ARM LENGTH | WIDTH OF GRIP | STROKE WIDTH | A | В | С | D | E | F | G | WEIGHT |
|-------|-----------------------------|---------------------|----------------------|-----------------|--------------------|--------------------|--------------------|---|---|---|----------------------|-----------------------|
| VMPS2 | 2 t | 80 mm (3.1 in.) | 120 mm (4.7 in.) | | 8 mm (0.3 in.) | 6 mm (0.2 in.) | 15 mm (0.6 in.) | | | | 16 mm (0.625 in.) | 1.6 kg (3.5 lbs.) |
| VMPS3 | 3 t | 120 mm (4.7 in.) | 180 mm (7.1 in.) | | 6 mm (0.2 in.) | 7 mm (0.3 in.) | 15 mm (0.6 in.) | | | | 16 mm (0.625 in.) | 2.3 kg (5.1 lbs.) |
| VMPS5 | 5 t | 160 mm (6.3 in.) | 270 mm (10.6 in.) | | 11 mm (0.4 in.) | 10 mm (0.4 in.) | 25 mm (1 in.) | | | | 19 mm (.75 in.) | 4.3 kg (9.5 lbs.) |
| VMPS8 | 8 t | 210 mm (8.3 in.) | 300 mm (11.8 in.) | | 13 mm (0.5 in.) | 14 mm (0.6 in.) | 27 mm (1.1 in.) | 4 | | | 19 mm (.75 in.) | 6.1 kg (13.4 lbs.) |



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