

TIMKEN®



TIMKEN® MAINTENANCE TOOLS SOLUTIONS

ENSURING PERFORMANCE THROUGH PROPER
INSTALLATION AND REMOVAL OF BEARINGS

INSTALLATION TOOLS

Induction Heaters	3
Accessories	8
Impact Fitting Tool	10

REMOVAL TOOLS

Hydraulic and Self-Centering Hydraulic Pullers	12
Mechanical Pullers	14



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.	 READ THE INSTRUCTIONS.	 USE HEAT PROTECTIVE GLOVES.
--	--	---	--

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

See inside text for additional warnings.

INSTALLATION TOOLS

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.

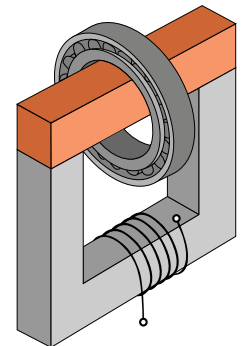
Timken® induction heaters use the principle of induction, similar to a transformer. The heater and yokes remain cool; only the work piece is heated. During the induction heating cycle, a certain degree of magnetism occurs. All Timken heaters demagnetize automatically after each heating cycle.

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. O.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. O.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. O.D.: 500 mm (19.7 in.)
Max. Width: 180 mm (7.1 in.)
Max. Weight: 100 kg (220.5 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 (881.8 lbs.)

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.)

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 (8.3 in.)
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.)

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.)

TECHNICAL DATA

	VHIN-10		VHIN-35		VHIS-75		VHIS-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, 14, 20, 40		7, 14, 40x50		20, 50		30, 70x80	
Yokes, option	-		-		-		-	
Swivel arm	No		No		Yes		Yes	
WORK PIECE								
Max. workpiece weight kg (±)	20		50		100		150	
Min. ID Ø mm, vertical/horizontal	10		10/65		30/72		45/110	
Max. O.D. mm	240		400		500		600	
Max. width mm	120		120		180		210	
POLE DIMENSIONS								
Pole height mm	135		130		185		205	
Pole diameter mm	40x40		40x50		50x50		70x80	
CONTROLS								
	G2		-		G2		G3	
Display	Digital		Digital		Touch		Digital	
Log function	No		No		Yes		No	
Magnetic probe	1		1		2		1	
Delta-T ΔT	No		No		Yes		No	
Temperature and speed control	No		No		Yes		No	
Temperature control	Yes		Yes		Yes		Yes	
Time control	Yes		Yes		Yes		Yes	
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	Yes		Yes		Yes		Yes	
Support for horizontal heating	No		Yes		Yes		Yes	
UNIT DIMENSIONS								
Dimensions mm (L x W x H)	460x240x280		600x226x272		702x256x392		788x315x456	
Dimensions inch (L x W x H)	18x1x9.4x11		23.6x8.9x10.7		27.6x10.1x15.4		31x12.4x18	

	VHIS-150		VHIS-200		VHIS-400		VHIN-600		VHIN-800	
ELECTRICITY										
Standard power 230V	8.0 kVA, 7.7 kVA, 8.4 kVA		12 kVA		18 kVA		24 kVA		40 kVA	
Optional power 120V	-		-		-		-		-	
Voltage/Amp standard	400V/20A, 500V/16A, 600V/14A		400V/30A, 500V/24A		400V/45A, 500V/36A		400V/60A, 500V/48A		400V/100A, 500V/80A	
Frequency Hz	50/60		50/60		50/60		50/60		50/60	
Yokes, standard, mm / set 1	30, 70x80		80x80x500		90x90x600		100x100x725		150x150x1140	
Yokes, option	-		20, 30, 40, 60		40, 60, 80		40, 60, 80		60, 80, 100	
Swivel arm	Yes		Yes		Yes		No		No	
WORK PIECE										
Max. workpiece weight kg (±)	200		400		600		800		1600	
Min. ID Ø mm, vertical/horizontal	45/110		30/135		60/150		260/60		330/90	
Max. O.D. mm	600		850		1050		1150		1700	
Max. width mm	210		320		400		430		710	
POLE DIMENSIONS										
Pole height mm	205		305		315		515		780	
Pole diameter mm	70x80		80x100		90x110		180x180		230x230	
CONTROLS										
	G2		G3		G2		G3		G2	
Display	Digital		Touch		Digital		Touch		Digital	
Log function	No		Yes		No		Yes		No	
Magnetic probe	1		2		1		2		1	
Delta-T ΔT	No		Yes		No		Yes		No	
Temperature and speed control	No		Yes		No		Yes		No	
Temperature control	Yes		Yes		Yes		Yes		Yes	
Time control	Yes		Yes		Yes		Yes		Yes	
Max. temperature °C / °F	240 °C / 464 °F		240 °C / 464 °F		240 °C / 464 °F		240 °C / 464 °F		240 °C / 464 °F	
Max. time range	0-99 min.		0-99 min.		0-99 min.		0-99 min.		0-99 min.	
Aut. demagnetising, <2A/cm	Yes		Yes		Yes		Yes		Yes	
Support for horizontal heating	Yes		Yes		Yes		Yes		Yes	
UNIT DIMENSIONS										
Dimensions mm (L x W x H)	788x315x456		1214x560x990		1344x560x990		1080x650x955		1520x750x1415	
Dimensions inch (L x W x H)	31x12.4x18		47.8x22x39		52.9x22x39		42.5x25.6x37.6		59.8x29.5x55.7	

INDUCTION HEATER SELECTION GUIDE USING WEIGHT AND O.D.

MAXIMUM WEIGHT	1600 kg 3527 lbs										VHIN-800
	800 kg 1764 lbs										VHIN-600
	600 kg 1323 lbs									VHIS-400	
	400 kg 882 lbs								VHIS-200		
	200 kg 440.9 lbs								VHIS-150		
	150 kg 330.7 lbs								VHIS-100		
	100 kg 220.5 lbs								VHIS-75		
	50 kg 110.2 lbs.								VHIN-35		
	20 kg 44 lbs.								VHIN-10		
			240 9.45 in.	400 mm 15.75 in.	500 mm 19.69 in.	600 mm 23.62 in.	600 mm 23.62 in.	850 mm 33.46 in.	1050 mm 41.34 in.	1150 mm 45.28 in.	1700 mm 66.93 in.
		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

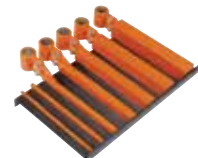
ACCESSORIES

GLOVES



Heat resistant to 150° C (302° F).

YOKE SET



Available for various models.

TEMPERATURE PROBE



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

PART NUMBERS

VHIN 10

Heater	VHIN-G2-10-230VEU
Heater	VHIN-G2-10-230VUS
Heater	VHIN-G2-10-230VGB
Heater	VHIN-G2-10-120VUS
Yoke	VHIY-7X7X200
Yoke	VHIY-10X10X200
Yoke	VHIY-14X14X200
Yoke	VHIY-20X20X200
Yoke	VHIY-40X40X200
Yoke	VHIY-40X50X200

VHIN 35

Heater	VHIN-G2-35-230VEU
Heater	VHIN-G2-35-230VGB
Heater	VHIN-G2-35-230VUS
Heater	VHIN-G2-35-120VUS
Heater	VHIN-G3-35-230VEU
Heater	VHIN-G3-35-230VUS
Heater	VHIN-G3-35-120VUS
Heater	VHIN-G3-35-230VGB
Yoke	VHIY-7X7X200
Yoke	VHIY-10X10X200
Yoke	VHIY-14X14X200
Yoke	VHIY-20X20X200
Yoke	VHIY-40X40X200
Yoke	VHIY-40X50X200

VHIS 75

Heater	VHIS-G2-75-230VEU
Heater	VHIS-G2-75-230VGB
Heater	VHIS-G2-75-230VUS
Heater	VHIS-G2-75-120VUS
Heater	VHIS-G3-75-230VEU
Heater	VHIS-G3-75-230VUS
Heater	VHIS-G3-75-120VUS
Yoke	VHIY-10X10X280
Yoke	VHIY-14X14X280
Yoke	VHIY-20X20X280
Yoke	VHIY-30X30X280
Yoke	VHIY-40X40X280
Yoke	VHIY-50X50X280
Yoke	VHIY-60X60X280

VHIS 100

Heater	VHIS-G2-100-230VEU
Heater	VHIS-G2-100-230VUS
Heater	VHIS-G2-100-230VGB
Heater	VHIS-G3-100-230VEU
Heater	VHIS-G3-100-230VUS
Heater	VHIS-G3-100-230VGB
Yoke	VHIY-10X10X350
Yoke	VHIY-14X14X350
Yoke	VHIY-20X20X350
Yoke	VHIY-30X30X350
Yoke	VHIY-40X40X350
Yoke	VHIY-50X50X350
Yoke	VHIY-60X60X350
Yoke	VHIY-70X70X350
Yoke	VHIY-70X80X350

VHIS 150

Heater	VHIS-G2-150-600VUS
Heater	VHIS-G2-150-500VUS
Heater	VHIS-G2-150-400VEU
Heater	VHIS-G2-150-500VEU
Heater	VHIS-G3-150-600VUS
Heater	VHIS-G3-150-500VUS
Heater	VHIS-G3-150-400VEU
Heater	VHIS-G3-150-500VEU
Yoke	VHIY-10X10X350
Yoke	VHIY-14X14X350
Yoke	VHIY-20X20X350
Yoke	VHIY-30X30X350
Yoke	VHIY-40X40X350
Yoke	VHIY-50X50X350
Yoke	VHIY-60X60X350
Yoke	VHIY-70X70X350
Yoke	VHIY-70X80X350

VHIS 200

Heater	VHIS-G2-200-400VEU
Heater	VHIS-G2-200-500VEU
Heater	VHIS-G2-200-500VUS
Heater	VHIS-G3-200-400VEU
Heater	VHIS-G3-200-500VEU
Heater	VHIS-G3-200-500VUS
Yoke	VHIY-20X20X500
Yoke	VHIY-30X30X500
Yoke	VHIY-40X40X500
Yoke	VHIY-60X60X500
Yoke	VHIY-80X80X500

VHIS 400

Heater	VHIS-G2-400-400VEU
Heater	VHIS-G2-400-500VUS
Heater	VHIS-G3-400-400VEU
Heater	VHIS-G3-400-500VUS
Yoke	VHIY-40X40X600
Yoke	VHIY-60X60X600
Yoke	VHIY-80X80X600
Yoke	VHIY-90X90X600

VHIN 600

Heater	VHIN-G2-600-400VEU
Heater	VHIN-G2-600-500VUS
Heater	VHIN-G3-600-400VEU
Heater	VHIN-G3-600-500VEU
Heater	VHIN-G3-600-500VUS
Yoke	VHIY-40X40X725
Yoke	VHIY-50X50X725
Yoke	VHIY-60X60X725
Yoke	VHIY-80X80X725
Yoke	VHIY-100X100X725

VHIN 800

Heater	VHIN-G2-800-400VEU
Heater	VHIN-G2-800-500VUS
Heater	VHIN-G3-800-400VEU
Heater	VHIN-G3-800-500VUS
Yoke	VHIY-60X60X1140
Yoke	VHIY-80X80X1140
Yoke	VHIY-100X100X1140
Yoke	VHIY-150X150X1140

ACCESSORIES

- Temp Probe VHIA100001-Temp Probe 240C/464F - Small
- Temp Probe VHIA100014-Temp Probe 350C/662F - Small
- Gloves VHIA100020-Heat Resistant Gloves
- Temp Probe VHIA100015-Temp Probe 240C/464F - Large

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.



This set includes:

- 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.

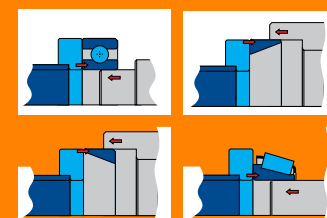
- When operating the impact fitting tool, wear protective clothing, including safety shoes, protective glasses, gloves and helmet.
- Do not use the collets to mount components that have temperatures greater than 80° C (176° F).
- Never mount the cup and cone of a tapered bearing together and never mount 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
A1	10-26	000	6000	129	7000					
	10-30	200	6200	1200		3200				
			2200							
	10-35	300	6300	1300	7300					
	12-28	001	6001							
	12-32	201	6201	1201		3201				
			2201							
	12-37	301	6301	1301	7301					
			2301							
	15-32	002	6002							
15-35	202	6202	1202	7202B	3202					
		2202								
15-42	302	6302	1302		3302			30302		
		2302								
17-35	003	6003								
		16003								
17-40	203	6203	1203	7203B	3203				30203	
		2203								
17-47	303	6303	1303	7303B	3303				30303	32303
		2303								
B2	20-42	004	6004		7004					32004
	20-47	204	6204	1204	7204B	3204		204	30204	
			2204							
	20-52	304	6304	1304	7304B	3304	21304	304	30304	32304
		403	6403	2304						
	25-47	005	6005		7005					32005
	25-52	205	6205	1205	7205B	3205	22205	205	30205	33205
			2205					32205		
	25-62	305	6305	1305	7305B	3305	21305	305	30305	31305
		404	6404	2305						32305
30-55	006	6006							32006	
30-62	206	6206	1206	7206B	3206	22206	206	30206	33206	
		2206					32206			
30-72	306	6306	1306	7306B	3306	21306	306	30306	31306	
	405	6405	2206				405		32306	
C3	35-62	007	6007		7007					32007
	35-72	207	6207	1207	7207B	3207	22207		30207	33207
			2207					32207		
	35-80	307	6307	1307	7307B	3307	21307	307	30307	31307
		406	6406	2307				406		32307
	40-68	008	6008							32008
	40-80	208	6208	1208	7208B	3208	22208	208	30208	33208
			2208					32208		
	40-90	308	6308	1308	7308B	3308	21308	308	30308	31308
		407	6407	2308				22308	407	32308
45-75	009	6009							32009	
45-85	209	6209	1209	7209B	3209	22209	209	30209	33209	
		2209					32209			
45-100	309	6309	1309	7309B	3309	21309	309	30309	31309	
	408	6408	2309				22309	408	32309	
50-80	010	6010							32010	
50-90	210	6210	1210	7210B	3210	22210	210	30210	33210	
		2210					32210			
50-110	310	6310	1310	7310B	3310	21310	310	JM205149/JM205110	31310	
	409	6409	2310				22310	409	30310	32310
Impact rings 50-90, 45-100, 50-110 also fit the following bearing where only the outer ring is to be fitted, e.g., shaft not installed:										
C3	50-90		6011							
			6012							
	45-100		6013	1211	7211B	3211	22211	211		
			6211	2211	7212B					
	50-110		6014	1212	7213B	3212	22212	212		
			6015	1213		3213	22213	213		
			6212	2213		3211	21311	311		
			6213	2213			22311	410		
			6311	1311						
			6410	2311						

For tapered bearings, impact rings fit outer ring and also inner ring if driving from large-diameter side. The numbers on each impact ring (e.g., 25-62) are clearly marked on the ring. The first figure refers to shaft diameter, the second to bearing outer diameter.

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	B	C	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	B	C	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. O.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 (12.1 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

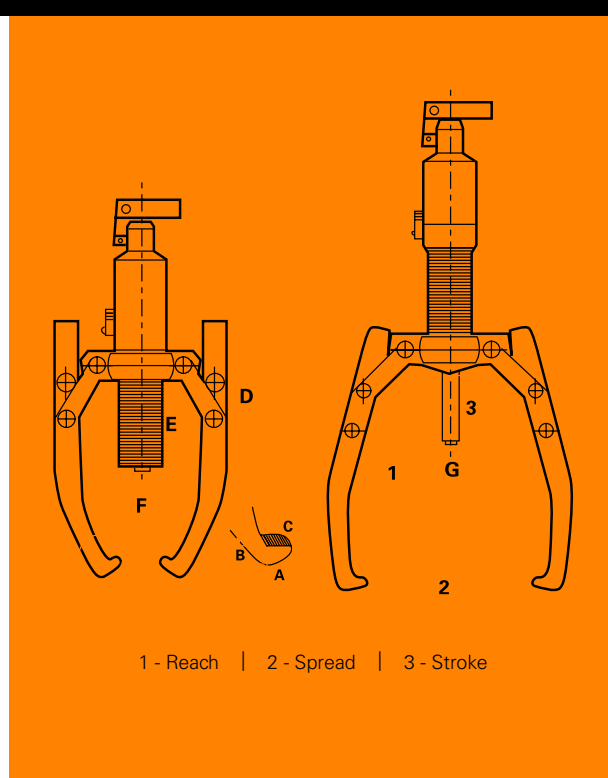
After the required type of puller has been identified, it is easy to choose the most suitable model from the series listed in the catalog.

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	B	C	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.)				19 mm (.75 in.)	6.1 kg (13.4 lbs.)





TIMKEN

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets bearings, gear drives, automated lubrication systems, belts, brakes, clutches, chain, couplings, linear motion products and related industrial motion rebuild and repair services.

Stronger. By Design.

www.timken.com