# Hobbing Machines LC $180/280 \alpha$



## LIEBHERR

### **Increased Performance**



#### Hob head

The new hob head stands for greater flexibility and productivity. Workpieces up to a module of 5 millimeters can be machined. The spindle speed has been increased by 50 % to 2,250 revolutions per minute compared to the predecessor model. At the same time, the shift distance has been extended by 11 % to 200 millimeters, and the maximum tool diameter has been enhanced by 67 % to 150 millimeters.

• Drive power: 13 kW

• Speed of hob spindle: 2,250 rpm

Max. module: 5 mm
Shift distance: 200 mm
Max. hob diameter: 150 mm



#### Dry machining with stainless steel housing

Thanks to an integrated complete stainless steel housing (optional), thermal influences that normally occur in dry machining can be minimized. This ensures consistent machining results and exceptionally high process reliability. In addition, chip accumulation can be prevented. The easy, fast cleaning of the machine is another benefit.



#### LHGearTec: Safe and easy set-up of processes

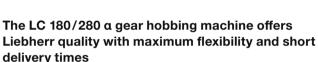
The touch-based LHGearTec features importing of work-piece and tool data in GDE and DIN4000 formats. This enables digital and automated workflow which increases ease of use and operator safety.

The LHGearTec user interface not only includes process monitoring and support for the set-up procedure, but also the "Defining bad hob sectors" function, thereby taking advantage of the maximum tool life.

Another benefit is the standardized data profiles for collecting process and machine data. This information can be transferred via OPC UA or MTConnect to higher-level systems.

## **Machine concept**





The LC 280  $\alpha$  gear hobbing machine is the perfect entry into gear cutting. It offers maximum flexibility thanks to a diverse range of workpieces, well-known Liebherr quality, and low acquisition cost.

The machine with a new hob head and perfected chip removal is ideal for the supplier business, especially because of the fast delivery time of approx. three months and high productivity.

The entry model comes with the touch-based user interface LH Geartec and a ringloader concept for loading and unloading workpieces up to 15 kg.

#### Maschine

- Machining workpieces with max. 280 mm diameter and shafts with a length of up to 500 mm
- L-door for nobstructed accessibility
- Thermal constant machine bed
- Wet and dry machining possible
- High stiffness safes the best machining quality
- Optimized chip removal
- Hook-ready machines for a fast installation and brining into service

#### **Automation**

- Plastic chain conveyor (KKB)
- Storage capacity: 20 workpieces à 15 kg/30 workpieces à 10 kg
- Suitable for a fast ring loader setting (up to 15 kg workpiece weight) for max. productivity



#### Δxes

- X1: Radial movement of column slide
- V1: Tangential movement of tool
- Z1: Axial movement of hob head
- B1: Rotary movement of tool
- C2: Rotary movement of workpiece
- A1: Swivel movement of tool
- Z4: Vertical movement of counter column
- C3: Rotary movement of ringloader

		LC 180 a	LC 280 a
Max. workpiece diameter	mm	180	280
Max. nominal module	mm	5	5
Workpiece weight	kg	15	15
Max. workpiece length			
(manual loading)	mm	500	500
Max. hob slide travel (axial travel)	mm	400	400
Table diameter	mm	145	145
Table speed	min <sup>-1</sup>	250	250
Drive power of table	kW	5,8	5,8
Centre distance hob/work table	min. mm	10	10
	max. mm	200	280
Hob head swivel angle	Degrees	± 45	± 45
Hob arbor main bearing		collet chuck/HSK 63	
Hob arbor counter bearing		SK 30	
Max. shift travel	mm	200	200
Max. hob diameter	mm	150	150
Max. hob length	mm	360	360
Max. Hob speeds	min <sup>-1</sup>	2.250	2.250
Driving power hob spindle	kW	13,2	13,2
Weight of machine with tailstock			
column	ca. kg	12.000	12.000
Total connected load	ca. kVA	28	28

## Your solution provider



#### Liebherr-Verzahntechnik GmbH Gear Technology and Automation Systems

Kaufbeurer Strasse 141 87437 Kempten Germany

**2** +49 831 786-0 **2** +49 831 786-1279 info.lvt@liebherr.com

#### Liebherr-Verzahntechnik GmbH

Plant Ettlingen/Gear Tools Hertzstrasse 9–15 76275 Ettlingen Germany

**2** +49 7243 708-0 **3** +49 7243 708-685 tools.lvt@liebherr.com

#### Liebherr-Utensili S.r.l.

Via Nazioni Unite 18 10093 Collegno TO Italy

2 +39 114 248711♣ +39 114 559964info.lut@liebherr.com

#### Liebherr-Verzahntechnik GmbH

6 Place Du Village 92230 Gennevilliers France

**№** +33 1 412110-35

info-machineoutil@liebherr.com

#### Liebherr-Gear Technology, Inc. Liebherr Automation Systems Co.

1465 Woodland Drive Saline, MI 48176–1259 USA

**2** +1 (734) 429-7225 **3** +1 (734) 429-2294 info.lgt@liebherr.com

## Liebherr Brasil Guindastes e Máquinas Operatrizes Ltda.

Rua do Rocio, 288 Salas 81 / 82 Vila Olímpia 04552-000 São Paulo - SP Brazil

**№** +55 11 3538 1509 info.lbr@liebherr.com

#### Liebherr Machine Tools India Private Limited

353/354, 4th Main, 9th Cross, 4th Phase Peenya Industrial Area Bangalore – 560 058

**2** +91 80 41 1785-91 **3** +91 80 41 272625 info.mti@liebherr.com

## Liebherr Machine Tools and Automation Korea Ltd.

174-30, Saneop-ro, Gwonseon-gu Suwon-si, Gyeonggi-do Korea

★ +82 31 294 9888 info.mak@liebherr.com

## Liebherr Machinery Service (Shanghai) Co. Ltd.

Building 1, 88 Maji Road Waigaoqiao FTZ 200131 Shanghai P.R. China

#### Liebherr Japan Co. Ltd

3-7-8, Kudan-Minami Chiyoda-Ku, Tokyo 102-0074 Japan

**2** +81 3 6272-8645 info.lvt.ljc@liebherr.com

#### 000 Liebherr-Russia

Bolshoy Palashevskiy pereulok 13/2 123104 Moscow Russia

**2** +7 495 280 18 91 **3** +7 495 280 18 92 info.lru@liebherr.com



2 +49 (0)831 786-0, Fax +49 (0)831 786-1279 www.liebherr.com, E-Mail: info.lvt@liebherr.com





