HOTLINE: +49-6158-84772
info@gk-werkzeugmaschinen.de

TH series HEAVY CNC ROLL GRINDER

GK WERKZEUGMASCHINEN GMBH

Swing Over Bed
Ø1000~Ø3000mm

DISTANCE BETWEEN CENTERS: 16M
DESIGNED FOR EXTRA LARGE ROLL GRINDING

The TH Series Roll Grinder fully exhibits Praise's unmatched manufacturing capabilities. This series of machine has been fully recognized by both domestic and foreign steel industries, as well as by the paper-making industry.

MACHINE FEATURES

- Traveling Wheelhead Type
- Exclusively planned control software allows for grinding various crowning curves.
- Separated structural design features high rigidity and resists heavy loads.
- Parallelism and straightness of the guideway are inspected and calibrated by laser unit.
- The wheel spindle runs on hydrodynamic and hydrostatic combination bearings.
- The table moves on hydrodynamic and hydrostatic combination guideway.
- Custom designs are available.

APPLICABLE INDUSTRIES

- Steel industry
- Roll machining industry
- Manufacturing and machining industry
- Paper-Making Industry

MODEL IDENTIFICATION

TH 200 - 15 L

Traveling Wheelhead
TH : Common Grinding
THC: Between Centers Grinding

Max. Swing Over Bed
TH100: Ø1000 mm
TH125: Ø1250 mm
TH160: Ø1600 mm
TH200: Ø2000 mm
TH300: Ø3000 mm
THC160: Ø1600 mm
THC200: Ø2000 mm

Max. Distance Between Centers
15L: 15 m

GRINDING ACCURACY

- Roundness: 0.002 ~ 0.005 mm
- Concentricity: 0.002 ~ 0.005 mm
- Cylindricity: 0.002 ~ 0.005 mm/m
- Profile accuracy: ±0.002~0.005 mm/m
- Surface roughness: Ra ≦0.3 μm

HOTLINE: +49-6158-84772
info@gk-werkzeugmaschinen.de

TH series

HEAVY CNC ROLL GRINDER

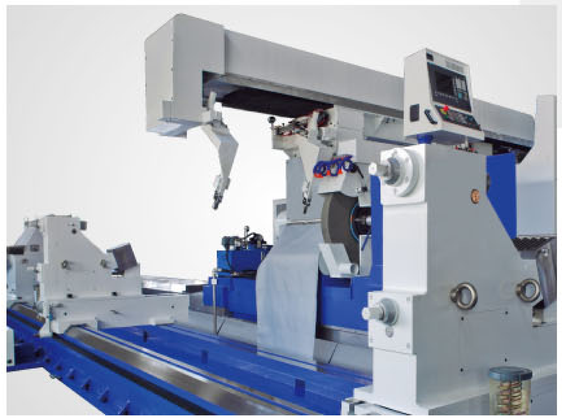
GK WERKZEUGMASCHINEN GMBH

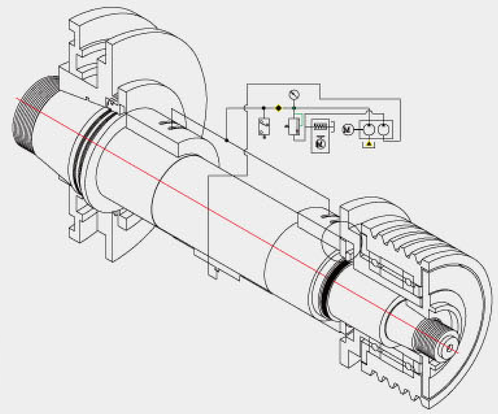
APPLICABLE INDUSTRIES

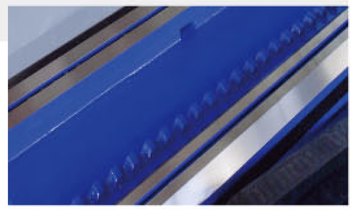
- Steel industry
- Paper industry
- Rubber and plastic industry
- Roll manufacturing industry

WHEELHEAD

- The wheelhead is capable of grinding crowns on a roller.
- The wheel spindle is supported by a combination of hydrodynamic and hydrostatic bearings without friction between metallic parts.







GUIDEWAY

The hydrodynamic / hydrostatic lubrication slideways are coated with Turcite-B to reduce friction for improved sliding effect. This also results in higher positioning and feed accuracy.

HEADSTOCK

- The headstock spindle is driven by a variable speed motor and transmitted through a German made speed reducer.
- The faceplate is available to fit with driving dogs or universal joints, and running speed can be set by CNC command.

TAILSTOCK

- The tailstock movement is driven by motor.
- The tailstock features air floating for reducing friction when moved.
- A wheel dresser is fitted on the tailstock for dressing wheel according to programmable setting.

HOTLINE: +49-6158-84772
info@gk-werkzeugmaschinen.de

TH series

HEAVY CNC ROLL GRINDER

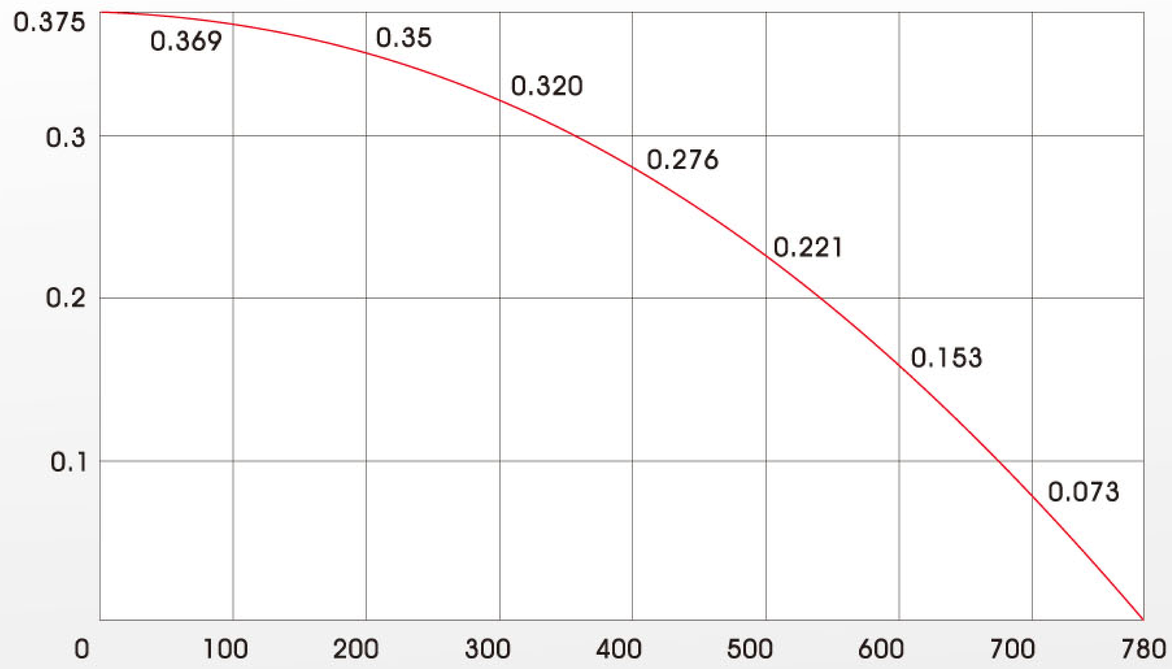
GK WERKZEUGMASCHINEN GMBH

ROLL CROWN GRINDING

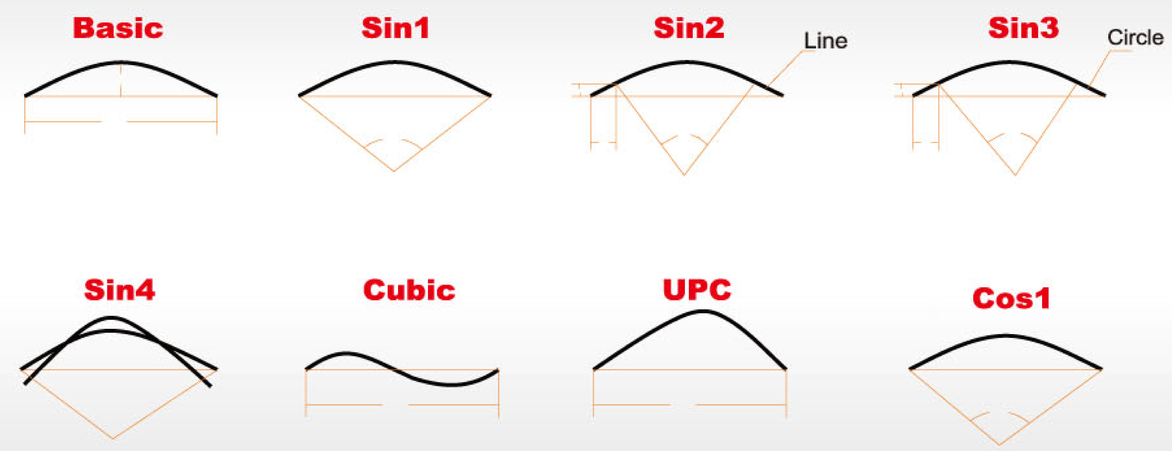
The operator may specify crown height and length of the roll as well as the desired curve through the program commands. Then the computer will calculate the continuous feed path of the grinding wheel. As a result, smooth crown surface can be quickly accomplished. To meet working requirements, various curve types can be extended, such as sine curve, cosine curve, cvc curve, upc curve and experience curve, etc.

MODEL	UNIT	TH100	TH125	TH160	TH200	TH250	TH300
Max. swing over bed	Ømm	1000	1250	1600	2000	2500	3000
Max. distance between centers	M	3~10	3~16	3~16	3~16	3~16	3~16
Max. weight of workpiece (with center)	TON	20	20	20	25	25	25
Max. weight of workpiece (with steady rest)	TON	25	25~60	40~80	120	120	120
THC center grinding	TON	20~50	30~70	40~90	50~100	50~100	50~100
Range of grinding diameter	Ømm	75~1000	150~1250	250~1600	250~2000	300~2500	350~3000
Max. diameter of crown (concave)	Ømm	10	10	10	10	10	10
Wheelhead travel (X axis)	mm	550	780	910	910	910	910
Carriage travel (Z axis)	mm	Center Distance +200mm	Center Distance +200mm	Center Distance +200mm	Center Distance +200mm	Center Distance +200mm	Center Distance +200mm

SAMPLES OF CROWNING CURVE



VARIOUS CROWNING CURVES



HOTLINE: +49-6158-84772
info@gk-werkzeugmaschinen.de

THC series

HEAVY CNC ROLL GRINDER

GK
WERKZEUGMASCHINEN GMBH

BETWEEN CENTERS GRINDING
ESPECIALLY APPLICABLE FOR ROLL MANUFACTURING

Swing Over Bed
Ø1000~Ø3000mm
DISTANCE BETWEEN CENTERS:16M

MACHINE FEATURES

- Specially designed between centers grinding construction allows heavy roll to be held by two centers.
- The new roll body, **neck** and transmission parts can be ground simultaneously with just one setup.
- Custom designs are available.
- Ruggedly constructed throughout. High efficiency and accuracy.

APPLICABLE INDUSTRIES

- Roll manufacturing industry