

SETCO'S SPINDLE & SLIDE REBUILD CAPABILITIES

- ✦ We Repair & Rebuild Almost Any Machine Tool Spindle
- ✦ Urgent Care Spindle Rebuild Services
- ✦ Domestic, OEM, and Custom Spindles
- ✦ On-site Spindle Vibration Analysis & Balancing
- ✦ Belt-driven, CNC, Geared & Motorized Designs
- ✦ Eight Strategically Located Spindle Centers
- ✦ Expert High Speed Spindle Service
- ✦ Slide Rebuilds & Reconditioning

NORTH AMERICAN SERVICE CENTERS

- | | | | |
|--|---|---|--|
| <p>WESTERN SERVICE CENTER</p> <p>5572 Buckingham Drive
Huntington Beach, CA 92649
(714) 372-3730
1 (866) 362-0699 Toll-Free</p> | <p>GREAT LAKES SERVICE CENTER</p> <p>41129 Jo Drive
Novi, MI 48375
(248) 888-8989
1 (877) 773-5349 Toll-Free</p> | <p>MIDWEST SERVICE CENTER</p> <p>5880 Hillside Avenue
Cincinnati, OH 45233
(513) 941-5110
1 (800) 543-0470 Toll-Free</p> | <p>SOUTHEAST SERVICE CENTER</p> <p>3650 Burnette Park Drive
Suwanee, GA 30024
(770) 932-2353
1 (800) 830-4992 Toll-Free</p> |
|--|---|---|--|

ASIA SERVICE CENTERS

- | | | | |
|--|--|---|---|
| <p>INDIA WEST SERVICE CENTER</p> <p>D1-4/8, S No 15/2,
GKD Industrial Estate,
Nanded Village, Pune 411041
0091 20 6470-2938</p> | <p>INDIA EAST SERVICE CENTER</p> <p>No.3C, K.K Street,
Kasturi Nagar,
Ayanambakkam,
Chennai - 600 095</p> | <p>TAIWAN SERVICE CENTER</p> <p>No.5, Gung Ye 8 Rd
Taichung 407, Taiwan, R.O.C.
04-2358-1678</p> | <p>CHINA SERVICE CENTER</p> <p>No. 16, Lane 88, Fengnian Road
Malu Town, Jiading District
Shanghai 201801, P. R. China</p> |
|--|--|---|---|

SPINDLE BRANDS SETCO REBUILDS

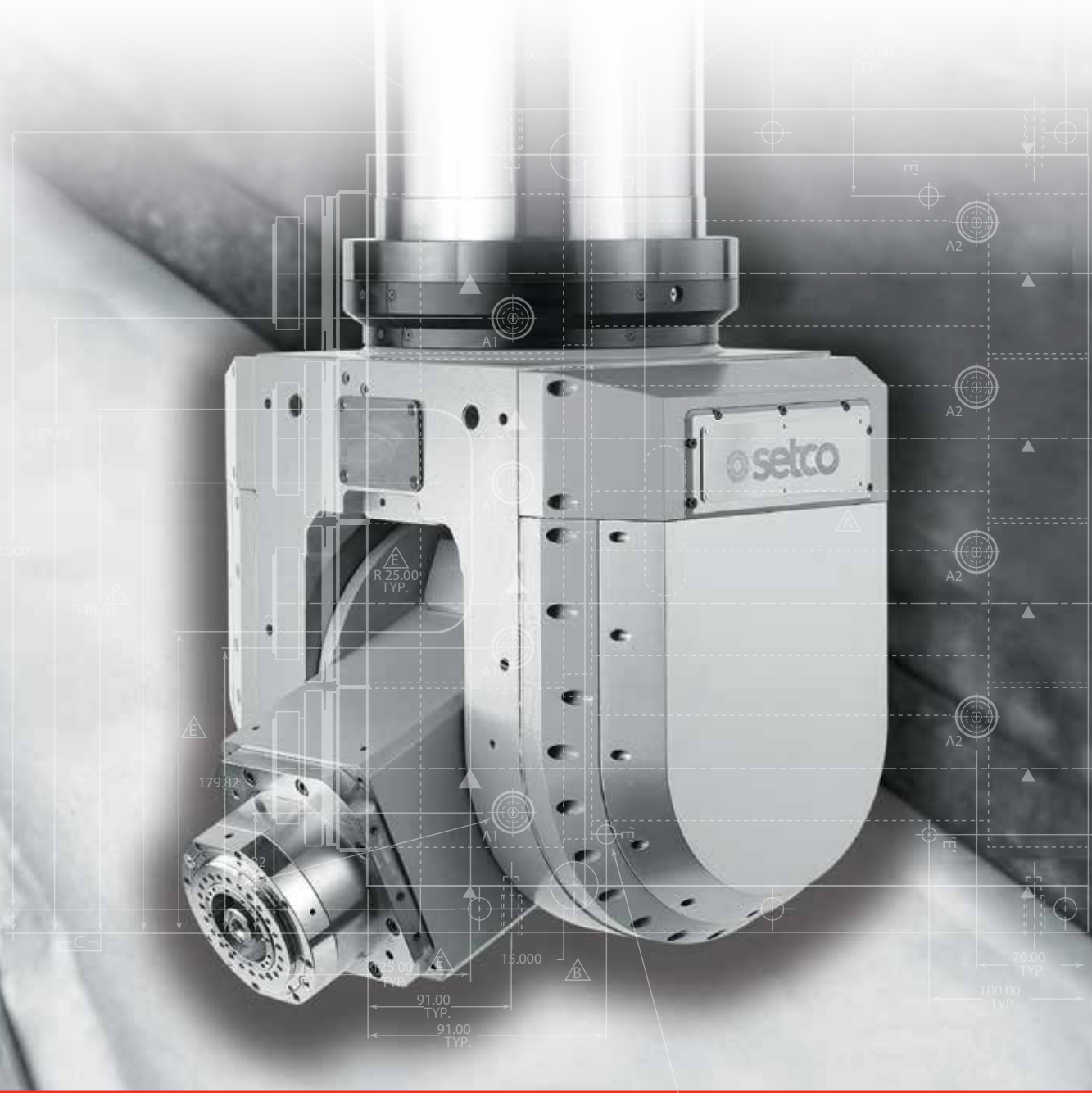
- | | | | | | | | |
|------------------|----------------|----------------|-----------------|---------------|-----------------|-----------------|--------------|
| ABRASIVE | COLONIAL | FRANZ KESSLER | IMC | LIAN-FENG | OKK | SCM | TOS-HOSTVAR |
| AETNA | COLUMBO | FRAUENTHAL | IMF | FRAUENTHAL | OKUMA HOWA | SECO | TOYO KOGYO |
| AGATHON | COMBING | GALLMEYER & | IMP | LIMA | OLIVER | SEIKO | TOYODA |
| AGT | COMEC | LVINGSTON | IMPCO | LINCO | OLOFFSON | SEIKO SEIKI | TRAMINER |
| ALPINE | COVEL | GAMFIOR | INCOB | LOH-GMN | OMLAT-TORINO | SETCO | TRAUB |
| ANAYAK | CYTEC | GARDNER | INDEX | MAAG | ONSRUD | SFJ | TREE |
| ARROW | DAEWOO | GILDEMEISTER | INGERSOLL | MAHO | Ooya | SHAPER | TRUFUTE |
| ASHAI | DAINICHI | GILMAN | INVINCEABLE | MANEX | ORION | SHEFFIELD | TSCHUDIN |
| ASV | DANOBAT | GIORDONA | IONIC | MASCO | ORTUNA | SHEFFIELD | TSUGAMI |
| ATLAS | DEARBORN | GLEASON | JAGER | MASTER | OVERBECK | SHIGYA | ULAM |
| AVON | DECKEL MAHO | GMN | JET | MATRIX | PAATZ | SHINO | UNISON |
| BARBER COLEMAN | DEMER | GMS | JOHN FORD | MATSUURA | PANGBURN | SHIZOUKA | UVA |
| BARNES | DEPENDABLE | GOMIYA | JONES & SHIPMAN | MATTISON | PARKER MAJESTIC | SHODA | VAN NORMAN |
| BAYER | DEUSCHLE | GRISSETTI | JUNG | MAXIM | PARVEX | SIARTO-SICAR | VICTOR |
| BEHR | DIBOLD | GROB | JUNGER | MAZAK | PBA | SIGA | VOLLMER |
| BERTONI & COTTI | DOALL | GROS-ITE | K.O. LEE | MOM CLOCK | PBS | SIGMA | VOUMARD |
| BIESSE | DOOSAN | HAAS | KAO | MEI SYSTEMS | PERSKJE | SIMPLEX | VULCANIARE |
| BLAKE | DROOP & REIN | HARDINGE | KASPER | MEIDEN | PIAT | SINTEX | WADKIN |
| BLANCHARD | DRR | HARIG | KELLENBERGER | MIGHTY COMET | PITTLER/KESSLER | SJOGREN SAGINAW | WAGNER |
| BLOHM | DUMORE | HARIL | KELLER | MIKRON | POPE | SKF | WAIDA |
| BOEHRINGER | DUNHAM | HARVILL | KENT | MILLTRONICS | PORTER | SMG | WALTER |
| BONEHAM & TURNER | EKSTROM | HAUSER | KENWARD | MITSUBISHI | PRATT-WHITNEY | SOPKO | WARD |
| BOWEN | ELB | HAWK | KESSLER | MITSUI | PRECISE | SPINTEC | WARDELL |
| BOYER-SCHULTZ | ELDORADO | HEALD | KIKINDA | MITSU-SEIKI | RAMBAUDI | SPRINGFIELD | WASINO |
| BRIDGEPORT | ELLIOT | HELLER | KINDT | MIYANO | RANSBURG | STAMA | WEDALCO |
| BROTHER | ELMO | HEMBURG | KINGSBURY | MONARCH | REID | STANDARD | WEISS |
| BROWN & SHARPE | EMAG | HEMPLE | KIRA | MOORE | REINECKER | STEINMETZ | WEISSER |
| BRYANT | ENSHU | HERBERT LINDER | KITAGAWA | MORI SEIKI | REISHAUER | STEP-TEC | WENDT |
| C.B. FERRARI | EUROTECH | HERBOLD | KITAKO | MYFORD | RIGID | STOFFEL | WENZLER |
| CAMPBELL | EVERITE | HERMLE | KITAMURA | MYL | RIVETT | STUDER | WEST WIND |
| CANTON | EWAG | HERTLEIN | KIWA | NAKAMURA TOME | ROCKWELL | SUGAMI | WHACEON |
| CARLSON | EXCELLO | HESSALL | KLINGELNBERG | NEO | ROKU ROKU | SUHNER | WHEELABRATOR |
| CARLTON | EXCELLON | HILLYER | KOLB | NEVELL | ROMAI | SUMMIT | WHITNOR |
| CARVER | FADAL | HIMMEL | KOMO | NICHOLS | RONOS | SUN TOOL | WICKMAN |
| CHEVALIER | FALCON | HITACHI | KONDA | NIGATA | ROSS | SUPAFINA | WILLEMIN |
| CHIRON | FALVA | HITACHI SEIKI | KOYO | NILES | ROYAL OAK | SWISS-LATHE | WIT-O-MATIC |
| CHURCHILL | FANUC | HMC | KRUGER | NIPPÉE | RUDEL | TAFT PIERCE | WOODS |
| CINCINNATI | FASSLER | HOLZMA | KUMER | NORMAC | SABRE | TAKATORI | YACHYO |
| CINEX | FAVETTO | HOWA | KURAKI | NORTON | SAIMP | TAKASAWA | YAM |
| CITIZEN | FELLOWS FEMCO | HUFFMAN | LAMB | NORTON | SAINT GOBAIN | TECHNICATEMPO | YAMADA |
| CLEERMAN | FEMINA | HURCO | LANCER | NSK | SAMSUNG | THEMAC | YAMAGUCHI |
| CLEVELAND | FIDIA | HYDROMAT | LANDIS | NTC | SATISLOH | THOMPSON | YAMAZAKI |
| COBURN | FISCHER | HYUNDAI | LASALLE | OBERG | SAWAY | THOR | YCK |
| COLLINS | FORTUNE VICTOR | IBAG | LEADWELL | OERLIKON | SCHNEIDER | TOSHIBA | ZIMMERMAN |
| COLMATIC | FOSDICK | IKEGAI | LEBLOND MAKINO | OKAMOTO | SCHUSSLER | | ZPS |



CORPORATE OFFICE

5880 Hillside Avenue
Cincinnati, OH 45233
(513) 941-5110
1 (800) 543-0470 Toll-Free
www.setco.com

MILLING HEADS



COMPANY HISTORY

Over 100 years of manufacturing high performance precision spindles and slides

For over 100 years -- since 1912 -- Setco has been a U.S. leader in the design, manufacture, & service of high performance precision spindles and slides; which includes belt-driven, CNC, gear-driven, motorized models, high speed, high frequency spindles, and complete lines of dovetail, hardened way, linear bearing, tooling, utility slides, and single and multi-axis machine modules. Setco products are recognized worldwide for accuracy, durability, and quality.

In 2012 Setco acquired Neo Precision and established the Precision Series Spindle Line. Setco Taiwan is located in the Taichung Industrial Area and strives to become the highest quality spindle provider. Setco's Precision line includes Direct-Drive Spindles, Motorized Spindles, and Swiveling Heads. Setco cooperates with well-known international companies from Japan and Europe to improve the skills of our workforce, technology of our products, and provide better service to our customers.

In addition, Setco also expanded in 2012 by acquiring UPSPL of Pune, India to service clients in the India market. Setco India recently moved to a new service center to support expanding service capabilities and new business.

For 2015, Setco will begin serving the China spindle repair market from our world class Shanghai service center. By summer of 2015 Setco will open a new service center in Chennai India to further serve the India Spindle Repair market.

Setco is the largest global independent rebuilder of precision machine tool spindles offering complete repair, rebuild, and spindle retrofit services. Spindle service is supported by six spindle service centers located in North America, Taiwan, and India to provide technical support for the following market segments.

- ⊕ Machine Tool Manufacturers
- ⊕ Special Machine Tool Builders and Integrators
- ⊕ Power Train Machinery Manufacturers and End Users
- ⊕ Industrial End Users in General

Mission Statement

A global precision spindle solutions and support network, partnering with customers to maximize productivity.

MILLING HEADS

DUAL AXIS ROTARY HEADS

C-SERIESPG 3



AUTOMATIC HEADS

A-SERIESPG 5



FIXED HEADS

F-SERIESPG 11



SEMI-AUTOMATIC MANUAL HEADS

M-SERIESPG 13



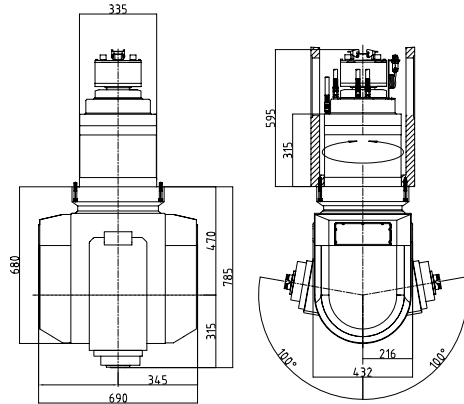
MANUAL HEADS

X-SERIESPG 15



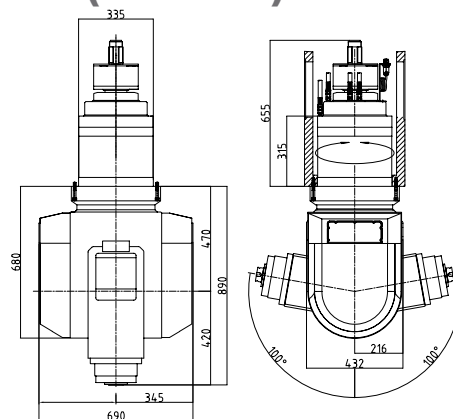
C68M04 ///.....

TWO-AXIS FORK MILLING HEAD (DD MOTOR)



C68M02 ///.....

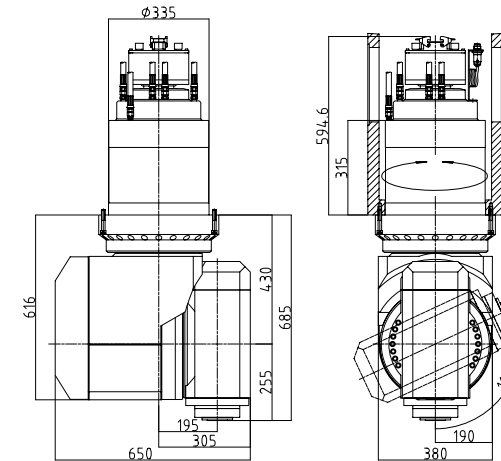
TWO-AXIS FORK MILLING HEAD (DD MOTOR)



ITEM/MODEL	C68M04	C68M02
Name	Two-Axis Fork Milling Head (DD Motor)	Two-Axis Fork Milling Head (DD Motor)
Tool System	HSK A63	HSK A100
Max Speed (rpm)	18000	10000 / 12000
Spindle Power (kW)	29.5 / 37	55 / 64
Spindle Max Torque (Nm)	70.4 / 88.3	124 / 162
Lubrication	Oil-Air	Grease / Oil-Air
A-Axis Division Angle	Continually	Continually
A-Axis Swiveling Angle	±100°	±100°
A-Axis Max Torque (Nm)	1378	1228
C-Axis Division Angle	Continually	Continually
C-Axis Rotary Angle	±220°	±220°
C-Axis Max Torque (Nm)	1500	1320
Measuring System	Absolute	Absolute
Positioning Accuracy	±2"	±2"

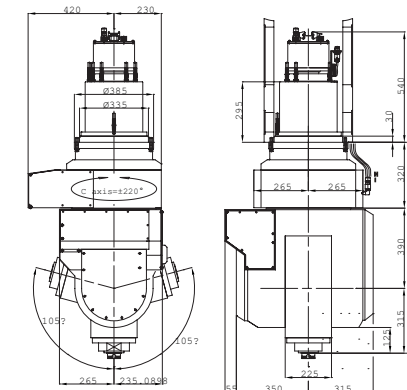
C67 ///.....

TWO-AXIS ORTHOGONAL MILLING HEAD



C66 ///.....

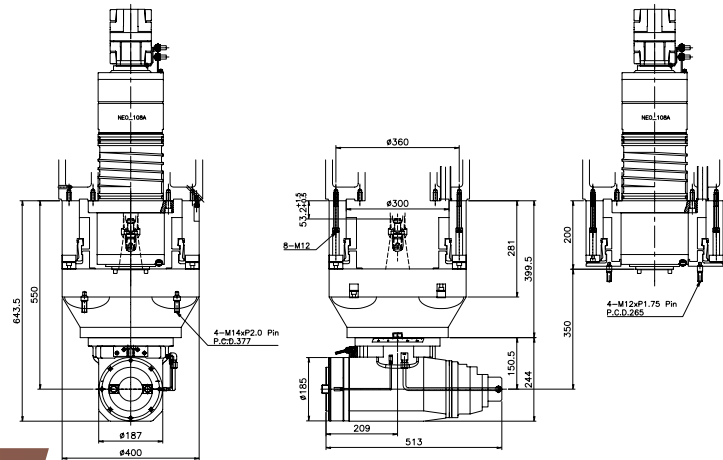
TWO-AXIS FORK MILLING HEAD (WORM GEAR)



ITEM/MODEL	C67	C66
Name	Two-Axis Orthogonal Milling Head	Two-Axis Fork Milling Head (Worm Gear)
Tool System	HSK A63	HSK A63
Max Speed (rpm)	18000	18000
Spindle Power (kW)	29.5 / 37	29.5 / 37
Spindle Max Torque (Nm)	70.4 / 88.3	70.4 / 88.3
Lubrication	Oil-Air	Oil-Air
A-Axis Division Angle	Continually	Continually
A-Axis Swiveling Angle	±115°	±105°
A-Axis Max Torque (Nm)	993	1000
C-Axis Division Angle	Continually	Continually
C-Axis Rotary Angle	±220°	±220°
C-Axis Max Torque (Nm)	993	1000
Measuring System	Absolute	Absolute
Positioning Accuracy	±2"	±2"

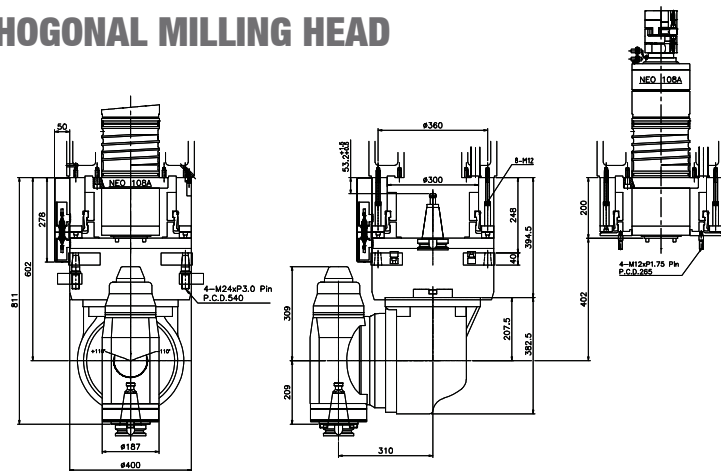
A55 ///.....

AUTO CHANGE 90° ANGLE MILLING HEAD



A58 ///.....

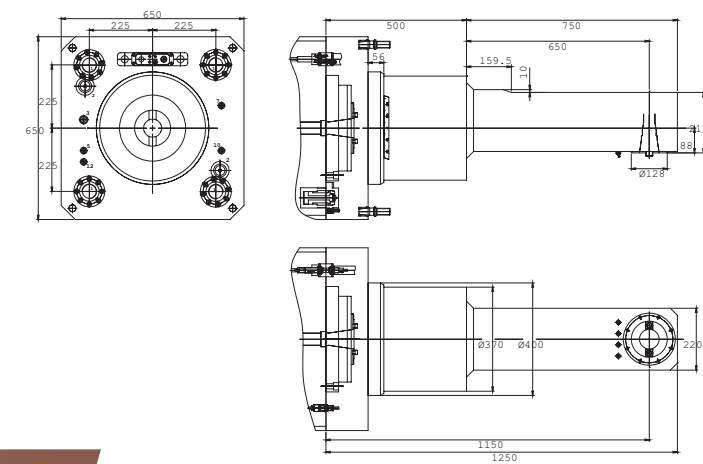
AUTO CHANGE ORTHOGONAL MILLING HEAD



ITEM/MODEL	A55	A58
Name	Auto. Change 90°Milling Head (32 Gripper)	Auto. Change Swiveling Milling Head (32 Gripper)
Tool System	BT50	BT50
Max Speed (rpm)	3500	3500
Clamping Force (kgf)	1200	1200
Lubrication	Grease	Grease
Tool Release Pressure (kgf / cm ²)	60	60
Max Torque (Nm)	1000	1000
A-Axis Division Angle	-	5°/ 2.5°/ 1°
A-Axis Swiveling Angle	-	± 110°
C-Axis Division Angle	5°/ 2.5°/ 1°	5°/ 2.5°/ 1°
C-Axis Rotary Angle	360°	-90 ~+270
Extension Distance (mm)	-	-

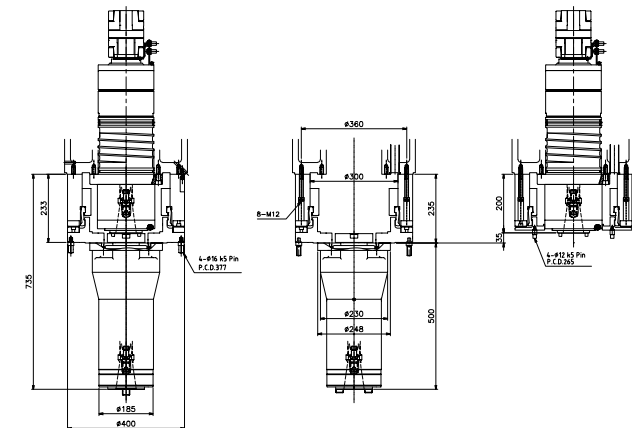
A56 ///.....

AUTO CHANGE EXTEND 90° MILLING HEAD



A62 ///.....

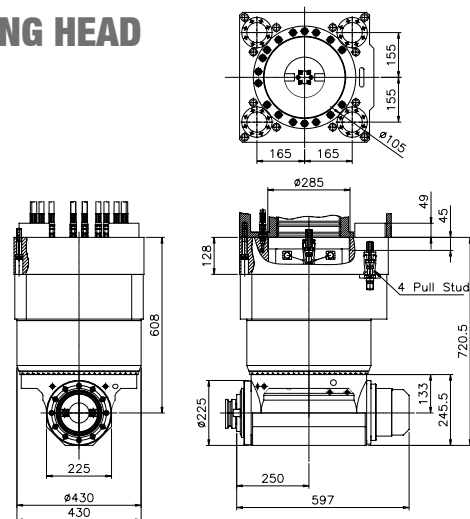
AUTO CHANGE EXTEND MILLING HEAD



ITEM/MODEL	A56	A62
Name	Auto. Change Extend 90°Milling Head (32 Gripper)	Auto. Change Extend Milling Head (32 Gripper)
Tool System	BT50	BT50
Max Speed (rpm)	3500	3500
Clamping Force (kgf)	M24 Bolt	1200
Lubrication	Grease	Grease
Tool Release Pressure (kgf / cm ²)	Manual	60
Max Torque (Nm)	300	650
A-Axis Division Angle	-	-
A-Axis Swiveling Angle	-	-
C-Axis Division Angle	5°/2.5°	-
C-Axis Rotary Angle	360°	-
Extension Distance (mm)	500	300 / 500

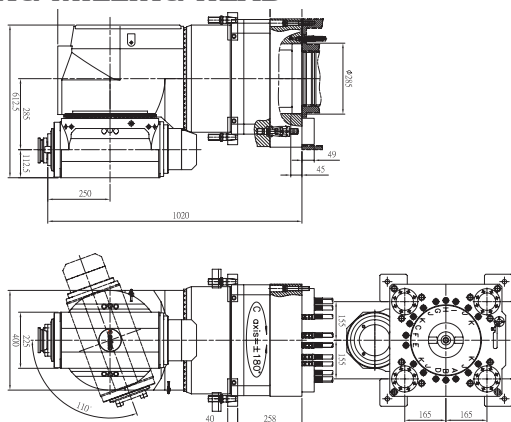
A55X ///.....

AUTO CHANGE 90° MILLING HEAD



A58X ///.....

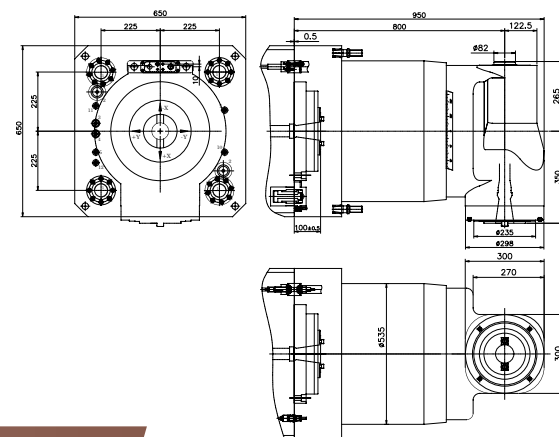
AUTO CHANGE SWIVELING MILLING HEAD



ITEM/MODEL	A55X	A58X
Name	Auto. Change 90°Milling Head (4-Pull Stud)	Auto. Change Swiveling Milling Head (4-Pull Stud)
Tool System	BT50	BT50
Max Speed (rpm)	2000	2000
Clamping Force (kgf)	1800	1800
Lubrication	Grease	Grease
Tool Release Pressure (kgf / cm ²)	70	70
Max Torque (Nm)	2000	2000
A-Axis Division Angle	-	5°
A-Axis Swiveling Angle	-	± 110°
C-Axis Division Angle	5°, 2.5°, 1°	5°, 2.5°
C-Axis Rotary Angle	360°	± 180°
Extension Distance (mm)	-	-

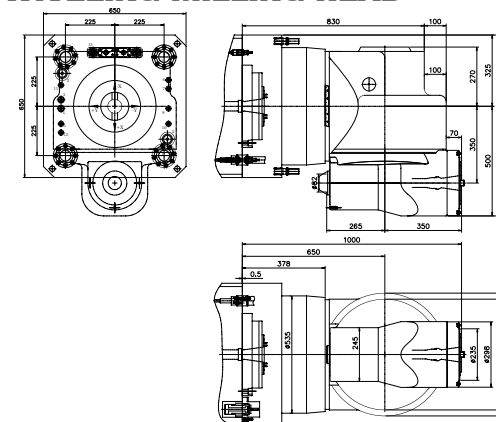
A55F ///.....

AUTO CHANGE 90° MILLING HEAD



A58F ///.....

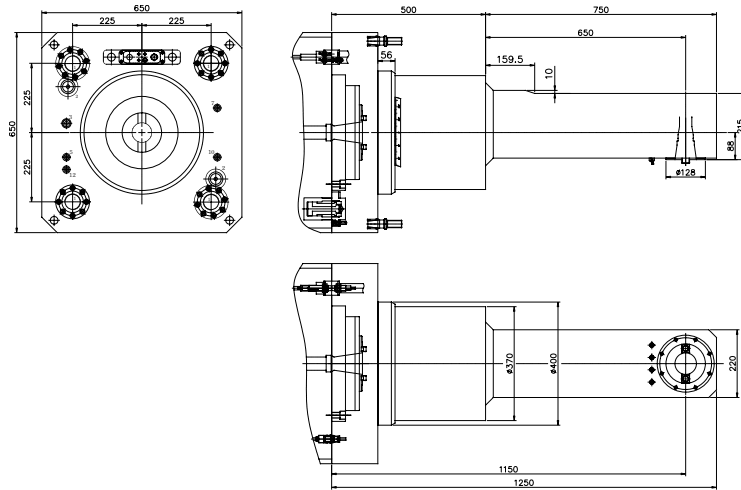
AUTO CHANGE SWIVELING MILLING HEAD



ITEM/MODEL	A55F	A58F
Name	Auto. Change 90°Milling Head	Auto. Change Swiveling Milling Head
Tool System	ISO 50 DIN	ISO 50 DIN
Max Speed (rpm)	1700	1700
Clamping Force (kgf)	2400	2400
Lubrication	Grease	Grease
Tool Release Pressure (kgf / cm ²)	70	70
Max Torque (Nm)	4000	4000
A-Axis Division Angle	-	2.5°
A-Axis Swiveling Angle	-	±110°
C-Axis Division Angle	2.5°	2.5°
C-Axis Rotary Angle	360°	-90°~ +180°
Extension Distance (mm)	-	-

A56F ///.....

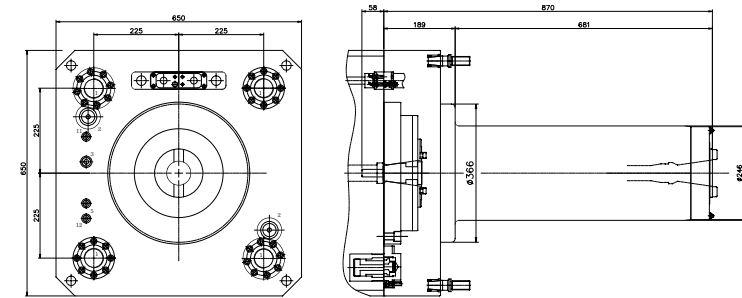
AUTO CHANGE EXTEND 90° MILLING HEAD



ITEM/MODEL		A56F
Name		Auto. Change Extend 90°Milling Head
Tool System		ISO 50 DIN
Max Speed	(rpm)	1800
Clamping Force	(kgf)	1200
Lubrication		Grease
Tool Release Pressure	(kgf / cm ²)	
Max Torque	(Nm)	190
A-Axis Division Angle		-
A-Axis Swiveling Angle		-
C-Axis Division Angle		2.5°
C-Axis Rotary Angle		360°
Extension Distance	(mm)	750

A62F ///.....

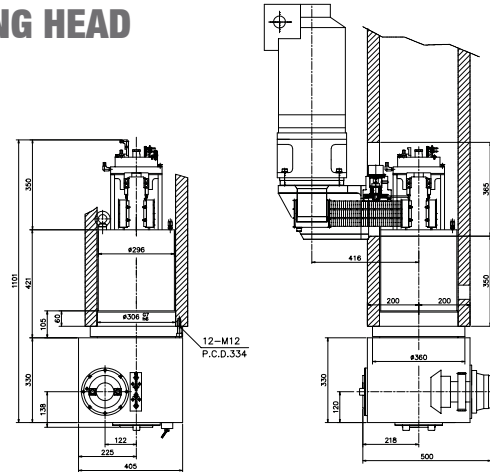
AUTO CHANGE EXTEND MILLING HEAD



ITEM/MODEL		A62F
Name		Auto. Change Extend Milling Head
Tool System		ISO 50 DIN
Max Speed	(rpm)	2000
Clamping Force	(kgf)	2400
Lubrication		Grease
Tool Release Pressure	(kgf / cm ²)	
Max Torque	(Nm)	2500
A-Axis Division Angle		-
A-Axis Swiveling Angle		-
C-Axis Division Angle		-
C-Axis Rotary Angle		-
Extension Distance	(mm)	680

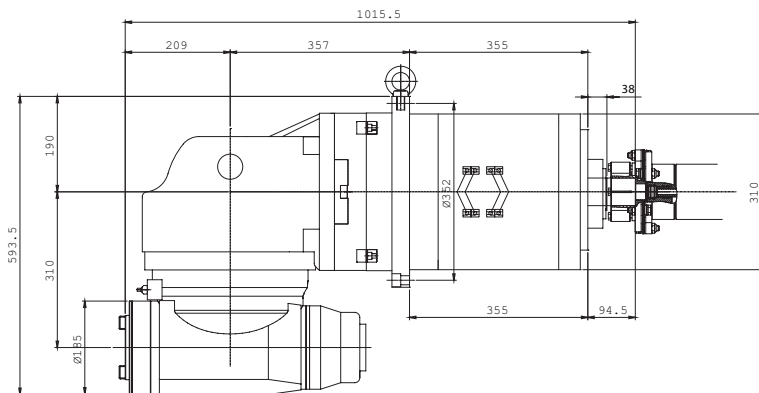
F54 ///.....

5 FACE AUTO MILLING HEAD



F58 ///.....

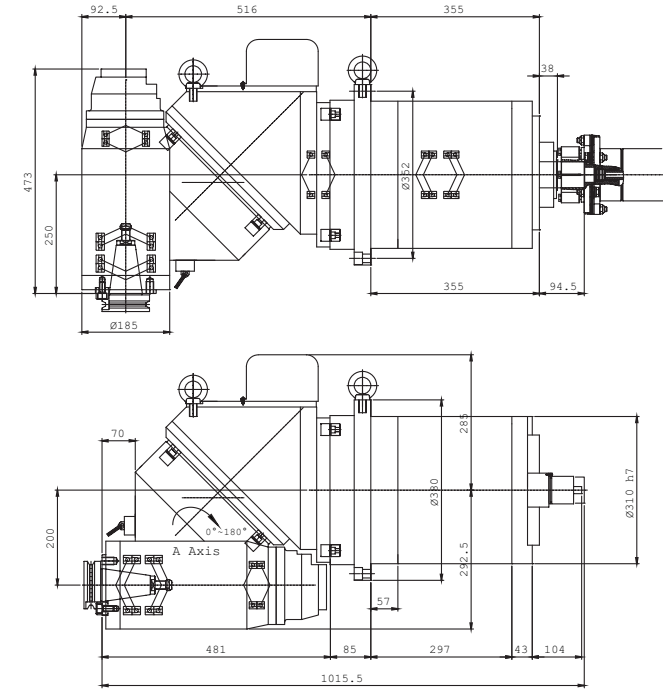
FIXED MULTI-ANGULAR SWIVELING HEAD



ITEM/MODEL	F54	F58
Name	5-Face Auto Milling Head	Fixed Multi-Angular Swiveling Head
Tool System	BT50	BT50
Max Speed (rpm)	3500	3500
Clamping Force (kgf)	1200	1200
Lubrication	Grease	Grease
Oil Pressure (Kgf / cm ²)	60	60
Max Torque (Nm)	1000	1000
A-Axis Division Angle	-	5°
A-Axis Swiveling Angle	-	± 110°
C-Axis Division Angle	5°	5°
C-Axis Rotary Angle	360°	-90°~ +270°

F59 ///.....

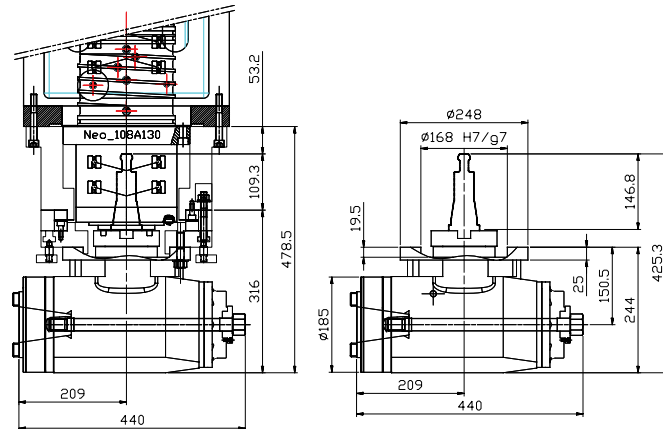
FIXED MULTI-ANGULAR SWIVELING HEAD



ITEM/MODEL	F59
Name	Fixed Mult-Angular Swiveling Head
Tool System	BT50
Max Speed (rpm)	3500
Clamping Force (kgf)	1200
Lubrication	Grease
Oil Pressure (Kgf / cm ²)	60
Max Torque (Nm)	1000
A-Axis Division Angle	5°
A-Axis Swiveling Angle	0°~180°
C-Axis Division Angle	5°
C-Axis Rotary Angle	-90°~ +270°

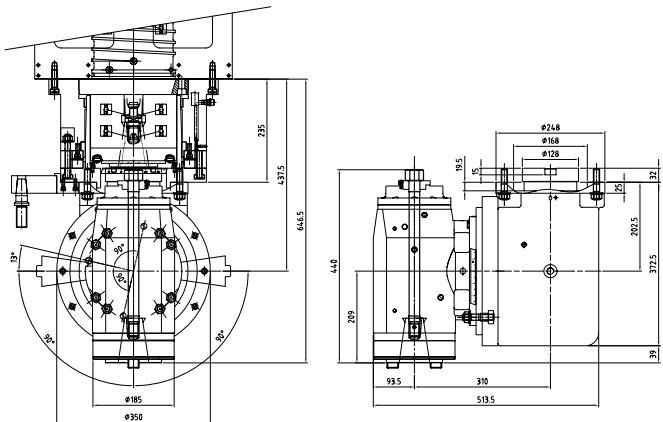
M55 ///.....

MANUAL CHANGE 90° ANGLE MILLING HEAD



M58 ///.....

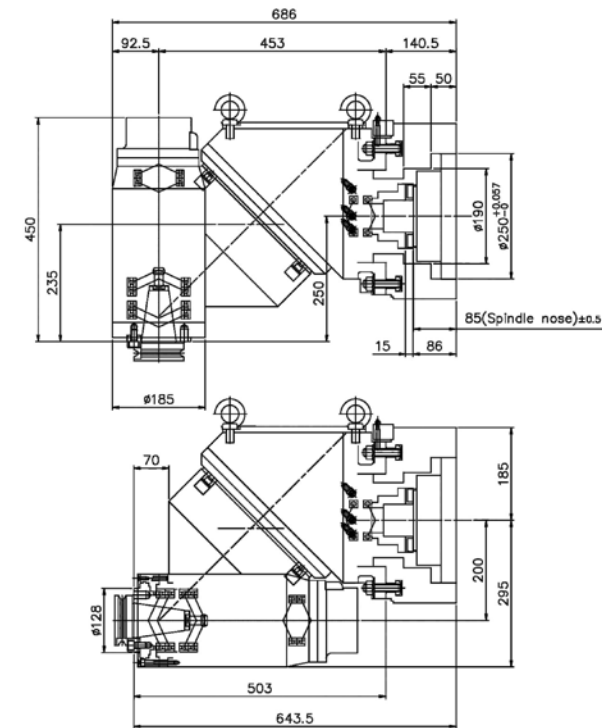
MANUAL CHANGE ORTHOGONAL MILLING HEAD



ITEM/MODEL	M55	M58
Name	Fully Manual Change 90°Milling Head (32 Gripper)	Fully Manual Change Swiveling Milling Head (32 Gripper)
Tool System	BT50	BT50
Max Speed (rpm)	3500	3500
Clamping Force (kgf)	1200~1500	1200~1500
Lubrication	Grease	Grease
Tool Release Pressure (kgf / cm ²)	Manual	Manual
Max Torque (Nm)	1000	1000
A-Axis Division Angle	-	T Trench
A-Axis Swiveling Angle	-	-
C-Axis Division Angle	5°/ 2.5°/ 1°	5°/ T Trench
C-Axis Rotary Angle	360°	-
Extension Distance (mm)	-	-

M57 ///.....

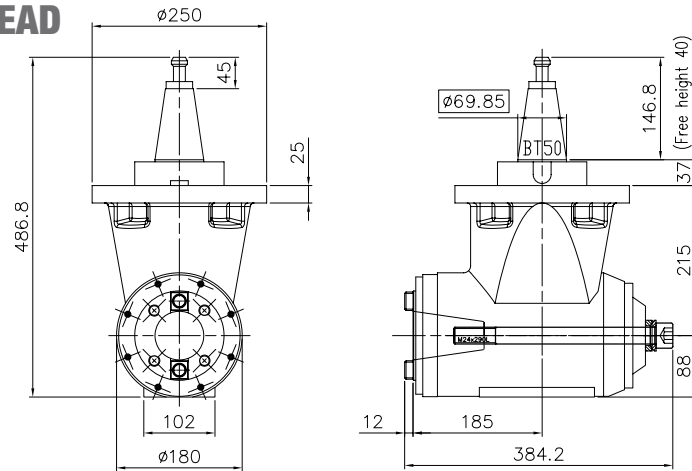
MANUAL VERTICAL HORIZONTAL MILLING HEAD



ITEM/MODEL	M57
Name	Manual Vertical Horizontal Milling Head
Tool System	BT50
Max Speed (rpm)	3500
Clamping Force (kgf)	1200
Lubrication	Grease
Tool Release Pressure (kgf / cm ²)	60
Max Torque (Nm)	1000
A-Axis Division Angle	5°
A-Axis Swiveling Angle	~180°
C-Axis Division Angle	T Trench
C-Axis Rotary Angle	-
Extension Distance (mm)	-

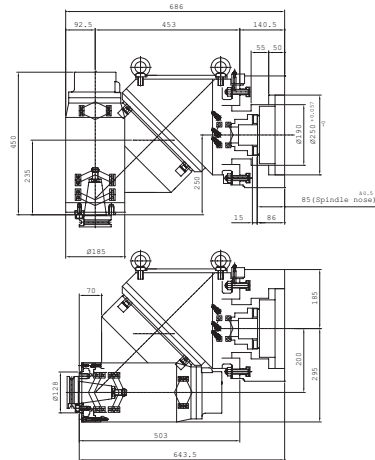
X55S/L ///.....

90° ANGLE MILLING HEAD



X57 ///.....

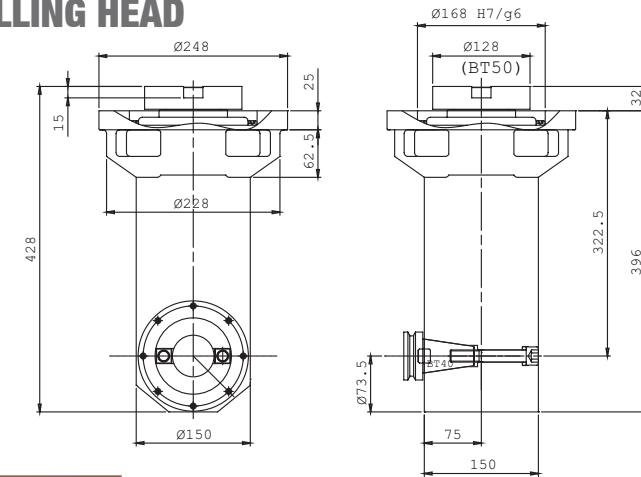
UNIVERSAL MILLING HEAD



ITEM/MODEL	X55S/L	X57
Name	90° Angle Milling Head	Universal Milling Head
Tool System	BT50	BT50
Max Speed (rpm)	2500	2500
Clamping Force (kgf)	M24 Bolt	M24 Bolt
Lubrication	Oil	Grease
Max Torque (Nm)	1200	1000
A-Axis Division Angle		
A-Axis Swiveling Angle		
C-Axis Division Angle		
C-Axis Rotary Angle		
Extension Distance (mm)		

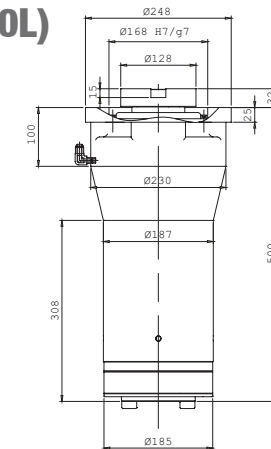
X56 ///.....

EXTEND 90° MILLING HEAD



X62 ///.....

EXTEND MILLING HEAD (300L/500L)



ITEM/MODEL	X56	X62
Name	Extend 90° Milling Head	Extend Milling Head
Tool System	BT50	BT50
Max Speed (rpm)	3500	3500
Clamping Force (kgf)	M24 Bolt	1200
Lubrication	Grease	Grease
Max Torque (Nm)	300	650
A-Axis Division Angle	-	-
A-Axis Swiveling Angle	-	-
C-Axis Division Angle	-	-
C-Axis Rotary Angle	-	-
Extension Distance (mm)	500	300 / 500

