



## Delta Technologies Group

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### EQUIPMENT LIST (METRIC)

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#### (21) Milling Machines

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##### (1) 7 axis (continuous) Milling Machines

**Parpas LHS (BM9 Parpas1)** – 7 axis horizontal machining center, Heidenhain iTNC530 control. X 6500 mm, Y 2000 mm, Z 1250 mm, W 1500 mm travel. 3000 x 2500 mm stationary table with unlimited load capacity. 2000 x 1600 mm traversing rotary table with 20,000 kg load capacity. 22,000 rpm orthogonal spindle, 5,000 rpm universal spindle, 5,000 rpm straight extension spindle. 60 automatic tool changer. Sescoi WorkNC, Lemoine RTM and Delcam Powermill CAM programming system.

##### (2) 5 axis (continuous) Milling Machines

**DMG DMU70V (HS6 DMG1)** – 5 axis vertical machining center. Heidenhain Millplus control. X 710 mm, Y 520 mm, Z 520 mm travel. 700 x 500 mm rotary tilting table with 350 kg load capacity. 12,000 rpm spindle. 24 automatic tool changer. Delcam Powermill CAM programming system.

**Mecof Dynamill 3000L (HL3 Mecof3)** – 5 axis vertical machining center. Fidia C20 control. X 4000 mm, Y 3000 mm, Z 1500 mm travel. 5000 x 3500 mm table with unlimited load capacity. 4,000 rpm roughing spindle, 12,000 rpm finishing spindle. 24 automatic tool changer. Secoi WorkNC CAM programming system.

##### (3) 5 axis (3+2) Milling Machines

**Mecof Agile CS 500 (HL1 Mecof1)** – 5 axis horizontal machining center. Fidia M2 control. X 3400 mm, Y 1000 mm, Z 1500 mm travel. 5200 x 1100 mm table with unlimited load capacity. 3,000 rpm roughing spindle, 21,000 rpm finishing spindle. 10 automatic tool changer. Secoi WorkNC CAM programming system.

**Mecof Agile CS 500 (HL2 Mecof2)** – 5 axis horizontal machining center. Fidia M2 control. X 3400 mm, Y 1000 mm, Z 1500 mm travel. 5200 x 1100 mm table with unlimited load capacity. 3,000 rpm roughing spindle, 21,000 rpm finishing spindle. 10 automatic tool changer. Secoi WorkNC CAM programming system.

**Tarus HS8412/48 (HL4 Tarus2)** – 5 axis vertical machining center. Fidia C10 control. X 3048 mm, Y 2895.6 mm, Z 1117.6 mm travel. 3048 x 1828.8 mm table with 22,680 kg load capacity. 10,000 rpm spindle. No tool changer. Delcam Powermill CAM programming system.

##### (2) 4 axis Milling Machines

**Toshiba BTD 13F R-22 (BM6 Toshiba2)** - 4 axis horizontal machining center, Tosnuc 888 control.

X 3000 mm, Y 2300 mm, Z 1600 mm travel. 2200 x 1800 mm traversing rotary table with 10,000 kg load capacity. 2,500 rpm spindle. No tool changer. Lemoine RTM CAM programming system.

**Toshiba BTD 13F R-22 (BM7 Toshiba3)** - 4 axis horizontal machining center, Tosnuc 888 control. X 3000 mm, Y 2300 mm, Z 1600 mm travel. 2200 x 1800 mm traversing rotary table with 10,000 kg load capacity. 2,500 rpm spindle. 38 automatic tool changer. Lemoine RTM CAM programming system.

### **(13) 3 axis Milling Machines**

**Depo MCFV 100 (HS1 Depo1)** – 3 axis vertical machining center. Heidenhain TNC426B control. X 1020 mm, Y 600 mm, Z 635 mm travel. 1270 x 600 mm table with 600 kg load capacity. 8,000 rpm spindle. 24 automatic tool changer. Secoi WorkNC CAM programming system.

**Depo MCFV 100 (HS2 Depo2)** – 3 axis vertical machining center. Heidenhain TNC426B control. X 1020 mm, Y 600 mm, Z 635 mm travel. 1270 x 600 mm table with 600 kg load capacity. 8,000 rpm spindle. 48 automatic tool changer. Secoi WorkNC CAM programming system.

**Depo MCFV 100 (HS3 Depo3)** – 3 axis vertical machining center. Heidenhain TNC426B control. X 1020 mm, Y 600 mm, Z 635 mm travel. 1270 x 600 mm table with 600 kg load capacity. 8,000 rpm spindle. 24 automatic tool changer. Secoi WorkNC CAM programming system.

**Depo MCFV 100 (HS4 Depo4)** – 3 axis vertical machining center. Heidenhain TNC426B control. X 1020 mm, Y 600 mm, Z 635 mm travel. 1270 x 600 mm table with 600 kg load capacity. 8,000 rpm spindle. 24 automatic tool changer. Secoi WorkNC CAM programming system.

**Depo MCFV 1680 NT (HS5 Depo5)** – 3 axis vertical machining center. Heidenhain TNC426B control. X 1650 mm, Y 810 mm, Z 810 mm travel. 1800 x 780 mm table with 2,500 kg load capacity. 15,000 rpm spindle. 32 automatic tool changer. Secoi WorkNC CAM programming system.

**Droop & Rein FS 1255 KC (RM4 Droop4)** – 3 axis vertical machining center. Fidia M1.f control. X 2400 mm, Y 1250 mm, Z 1000 mm travel. 2950 x 1250 mm table with 12,000 kg load capacity. 3,150 rpm spindle. No tool changer. Lemoine RTM CAM programming system.

**Droop & Rein LFAS 2000 KC (RM7 Droop7)** – 3 axis vertical machining center. Fidia M1 control. X 4000 mm, Y 1800 mm, Z 1500 mm travel. 5500 x 2000 mm table with 15,000 kg load capacity. 2,000 rpm spindle. No tool changer. Lemoine RTM CAM programming system.

**Fadal VMC 4020 (EM1 Fadal1)** – 3 axis vertical machining center. Fadal CNC 32MP control. X 1016 mm, Y 508 mm, Z 508 mm travel. 1105 x 508 mm table with 680 kg load capacity. 10,000 rpm spindle. 21 automatic tool changer. Delcam Powermill CAM programming system.

**Fadal VMC 3016 (EM2 Fadal2)** – 3 axis vertical machining center. Fadal CNC 32MP control. X 762 mm, Y 406.4 mm, Z 508 mm travel. 990.6 x 406.4 mm table with 1,241 kg load capacity. 10,000 rpm spindle. 21 automatic tool changer. Delcam Powermill CAM programming system.

**HPM (MM1 HPM1)** – 3 axis vertical machining center. Fidia M1.f control. X 3067 mm, Y 2105 mm, Z 750 mm travel. 3657.6 x 1625.6 mm table. 8,000 rpm spindle. No tool changer. Delcam Powermill CAM programming system.

**HPM (MM2 HPM2)** – 3 axis vertical machining center. Fidia M1.f control. X 3121 mm, Y 2105 mm, Z 1155.8 mm travel. 3657.6 x 2032 mm table. 2,500 rpm spindle. No tool changer. Delcam Powermill CAM programming system.

**Roeders RFM 600 (EM3 Roeders1)** – 3 axis vertical machining center. Roeders RMS6 control. X 600 mm, Y 450 mm, Z 300 mm travel. 700 x 550 mm table with 800 kg load capacity. 42,000 rpm spindle. 18 automatic tool changer. Delcam Powermill CAM programming system.

**Sigma SDV-3224 (PM1 Sigma1)** – 3 axis vertical machining center. Fanuc Series 18i-MB control. X 3200 mm, Y 2400 mm, Z 760 mm travel. 3000 x 2200 mm table with 10,886 kg load capacity. 8,000 rpm spindle. 60 automatic tool changer. Lemoine RTM CAM programming system.

## **(2) Deep Hole Drilling Machines**

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**Tarus TPTCGD5X8 (GD1 Tarus1)** – 3 axis horizontal gun drill machining center. Tarus TPI-2000 control. X 2692 mm, Y 1524 mm, Z 762 mm travel. 2438 x 1524 mm table with 36,287 kg load capacity. 3,394 rpm deep drill spindle. 2,000 rpm auxiliary milling spindle. No tool changer. Lemoine RTM CAM programming system.

**Tarus TPTCGD508S (GD2 Tarus2)** – 3 axis horizontal gun drill machining center. Tarus TPI-2000 control. X 2692 mm, Y 1524 mm, Z 762 mm travel. 2438 x 1524 mm table with 36,287 kg load capacity. 3,394 rpm deep drill spindle. 2,000 rpm auxiliary milling spindle. No tool changer. Lemoine RTM CAM programming system.

## **(3) Electrical Discharge Machines**

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**E.R.M. (EB4 ERM1)** – Electrical discharge machine. X 1047.75 mm, Y 431.8 mm, Z 355.6 mm travel. 1016 x 533.4 mm table.

**Tritan Dual 2000 (EB2 & 3, Tritan1R & Tritan1L)** – Electrical discharge machine with dual heads. Salem Industries control. X 2876.55 mm, Y 852.93 mm, Z 457.2 mm travel. 4800 x 1450 mm table.

**Tritan Dual 2000 (EB5 & 6, Tritan2R & Tritan2L)** – Electrical discharge machine with dual heads. Belmopnt control. X 3606.8 mm, Y 1210.31 mm, Z 600 mm travel. 6045.2 x 1778 mm table.

## **(4) Coordinate Measuring Machines**

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### **(2) Gantry CMMs**

**Tarus TPINTB2085 (CM9 Tarus1)** – Gantry DCC CMM. Tarus EasyDMIS control. X 7260 mm, Y 2466 mm, Z 1524 mm travel. 7315 x 3048 mm table with unlimited load capacity.

**Tarus TPINTB2785 (CM11 Tarus2)** – Gantry DCC CMM. Tarus EasyDMIS control. X 9144 mm, Y 2997 mm, Z 2336 mm travel. 5486 x 2438 mm table with unlimited load capacity.

### **(2) Horizontal CMMs**

**Zett-Mess AMVFL (CM4 & 5, Zett-Mess1 & Zett-Mess2)** – Dual arm horizontal CMM. PC-DMIS control. X 6000 mm, Y 1600 mm, Z 2000 mm travel. 6000 x 3000 table with unlimited load capacity.

## **(4) Spotting Presses**

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**Dake 18-389 (SP4 Dake1)** – 150 ton spotting press. 1828.8 x 1219.2 mm table. 1498.6 mm daylight.

**USI Clearing PS4-300-156-100 (SP2 Clearing1)** – 300 ton spotting press. 3962.4 x 2540 mm table. 2489.2 mm daylight. Roll out bottom platen.

**Wemhoener (SP3 Wemhoener1)** – 220 ton spotting press. 2489.2 x 1549.4 mm table. 2082.8 mm daylight.

**Wheatley (SP1 Wheatley1)** – 150 ton spotting press. 2540 x 1524 mm table. 1905 mm daylight. Roll out bottom and swing out top platen.

### **(3) Injection Molding Machines**

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**Krauss Maffei KM3200-14700A (KM 3500T N)** – 3500 ton horizontal plastic injection molding machine. Krauss Maffei MC 3 control. 320 mm diameter tie bars with 2000 x 1700 mm distance between. 4200 mm of daylight. 2800 x 2500 mm platen size.

**Krauss Maffei KM3200-32000MC (KM 3500T S)** – 3500 ton horizontal plastic injection molding machine. Krauss Maffei control. 330 mm diameter tie bars with 2240 x 1800 mm distance between. 4200 mm of daylight. 3240 x 2800 mm platen size.

**Krauss Maffei KM1300-14700MC (KM 1450T S)** – 1450 ton horizontal plastic injection molding machine. Krauss Maffei control. 240 mm diameter tie bars with 1500 x 1250 mm distance between. 3050 mm of daylight. 2100 x 1960 mm platen size.

### **(7) Overhead Cranes**

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**C.R.B.** 18.14 / 18.14 metric ton bridge crane

**Demag** 36.29 metric ton bridge crane

**Demag** 36.29 metric ton bridge crane

**Demag** 18.4 / 36.29 metric ton bridge crane

**Michigan** 18.14 metric ton bridge crane

**Demag** 9.07 / 18.14 metric ton bridge crane

**Demag** 9.07 / 18.14 metric ton bridge crane

### **(129) CAD/CAM/Viewing/Inspection Software Licenses**

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#### **(6) Data Administration**

(1) Siemens	I-DEAS
(1) Siemens	Unigraphics
(1) Autodesk	Inventor
(1) PTC	Pro/E
(1) Dassault	CATIA V4
(1) Dassault	CATIA V5

#### **(42) Design**

(19) Siemens	I-DEAS
(20) Siemens	Unigraphics
(2) Dassault	CATIA V4
(1) Cimatron	Cimatron-E

#### **(24) Manufacturing**

(8) SESCOI	WorkNC
(7) Delcam	Powermill
(9) Lemoine	RTM

#### **(53) CAD Viewing**

(7) Siemens	VisMockup
(44) Actify	Spinfire Pro
(2) Actify	Publisher

**(4) Inspection**

(2) B & S	PC-DMIS
(2) Tarus	EasyDMIS

**Supported Neutral CAD File Formats**

STEP  
IGES  
PARASOLID  
JT