

DUGARD

Expertise with Imagination



DUGARD

www.dugard.com | sales@dugard.com | 01273 732286

The Best Kept Secret from Japan

30,000 machines installed worldwide. Feature exceptional quality, accuracy and rigidity as standard as well as high speed travels, choice of spindles up to 30,000rpm and 1000Nm torque. All machines are built using the "True Geometry System"



HX Series Horizontal Machining Centres

Standard Features

- Unrivalled accuracy ± 2 microns positional accuracy (full stroke)
- 1 micron repeatability
- **Pallet sizes from 250mm ~ 1,000mm square**
- Fastest rapid traverses on box ways 60m/min up to and including HX800
- Tool changer capacity up to 300
- **Twin pallet (std) and multi pallet systems** (field retrofittable)
- BT40 4 range spindle – 20,000rpm
- BT50 4 range spindle – 12,000rpm (8000rpm 1000Nm torque)



Model Shown - Kitamura HX400iG

Arumatic Control

Pioneering icon CNC operation with interactive touchscreen display technology

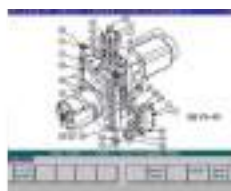
- **67 million** pulse encoder technology with **8192 block look-ahead processing speeds**
- Software upgrades throughout the life of the control
- Fanuc user-friendly
- Completely customisable and expandable user experience
- **Anywhere RemoTe** and visual programming screens
- email status updates



Customisable Icon Screen



Work Set Assistance



Maintenance Support Function



Intelligent Advanced Control System

Positioning Accuracy ± 0.002 mm / Full Stroke Repeatability ± 0.001 mm

DUGARD

Supercell 300 & 400G Horizontal 5 Axis Machining

Centres

Standard Features

- Unrivalled accuracy ± 2 microns positional accuracy (full stroke)
- 1 micron repeatability
- Pallet sizes from 300mm or 400mm square
- 60m/min rapid traverses
- BT40 15,000 or 20,000rpm
- 20 pallet system standard
- 174 ATC Standard (230 / 258 / 314 opt)



Model Shown - Kitamura Supercell 300G

Bridgecentre Double Column Machining Centres

Standard Features

- X travels available 815mm ~ 3,050mm
- Unrivalled accuracy ± 2 microns positional accuracy (full stroke)
 ± 1 micron on Jigcentre
- Rapid traverses 24m/min
- BT40 4 range spindle - 20,000rpm
- BT50 4 range spindle – 12,000rpm (8000rpm 1000Nm torque)



Model Shown - Kitamura Bridgecenter 10G

Mytrunnion 5 Axis Machining Centres

Standard Features

- Unrivalled accuracy ± 2 microns positional accuracy (full stroke)
 - ± 1 micron on Medcentre
- 1 micron repeatability
- Table sizes available 220mm ~ 1,000mm diameter
- Rapid traverses 60m/min
- HSK40 30,000rpm (Medcentre)
- BT40 4 range spindle – 20,000rpm
- BT50 4 range spindle – 12,000rpm (8000rpm 1000Nm torque)
- Single table, twin or multi pallet systems available



Model Shown
Kitamura Mytrunnion 4G

Mycentre Vertical Machining Centres

Standard Features

- X travels available 762mm to 1050mm
- Unrivalled accuracy ± 2 microns positional accuracy (full stroke)
 - 1 micron repeatability
- Rapid traverses 50m/min
- BT40 4 range spindle 20,000rpm
- 30 ATC

Model Shown - Kitamura Mycenter 3XD



Spark Changer Ultra High-Speed Twin Pallet Vertical Machining Centre

Standard Features

- X travel 600mm
- Pallet size 560 x 400mm
- BT 40 – 12,000rpm

Model Shown - Kitamura Mycenter 2XD Spark Changer



A New Alternative for Sliding Head Lathes

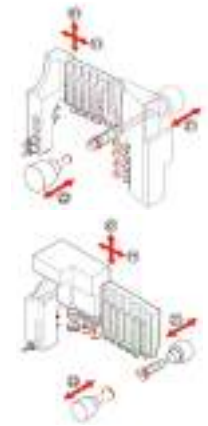
Hanwha machines are more competitive on price, have higher power and are approximately 20% heavier than most of the competition. They also feature removable guide bushes on most models



Hanwha XP Series

Standard Features

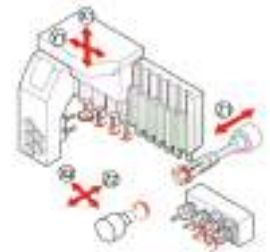
- Simple but highly efficient
- Specification and layout optimised for simple shaped parts
- High quality parts in short processing time
- $\text{Ø}12 \sim \text{Ø}32\text{mm}$



Hanwha XE Series

Standard Features

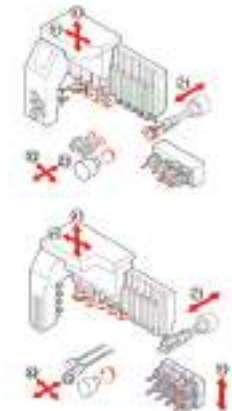
- Competitive price and cost-effective performance for simple to complex parts
- Various options including basic guide bush, non-guide bush or convertible guide bush
- $\text{Ø}20 \sim \text{Ø}35\text{mm}$



Hanwha XD Series

Standard Features

- Complex tooling and highly rigid structure for high complexity and precision
- Specially made for small, large or highly complex parts
- $\text{Ø}3 \sim \text{Ø}45\text{mm}$



Hanwha STL Series

Standard Features

- Hybrid turret / platten system
- Varied turret tooling and high motor specification (**23kW**) on main and sub spindle gives a machining advantage for highly complex parts
- Perfect for machining large parts up to $\text{Ø}38\text{mm}$
- **42mm available in 2020**



Originally Founded as part of the Samsung Group in Korea

An extensive range of CNC turning centres, superb quality with heavy duty boxways on all models



SMEC SL2000B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 67mm bar capacity with 8" chuck
- 540mm maximum swing
- 540mm maximum turned length (1000mm opt)
- 24/30 m/min rapid traverse X/Z axis
- 12 station bi-directional turret (24 opt)
- Programmable tailstock quill

Options include

Mill/drill, long bed, Y axis, sub-spindle



SMEC SL2500B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 76mm bar capacity with 10" chuck
- 540mm maximum swing
- 880mm maximum turned length (1000mm opt)
- 18/12/24/24 m/min rapid traverse X/Y/Z/B axis
- 12 station bi-directional turret (24 opt)
- Mill/Drill Y-axis turret with BMT65 tooling

Options include

Mill/drill, long bed, Y axis, sub-spindle



SMEC SL3000B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 90mm bar capacity with 12" chuck
- 650mm maximum swing
- 880mm maximum turned length (1100mm opt)
- 24m/min rapid traverse X/Z axis
- 12 station bi-directional turret (24 opt)
- Programmable tailstock quill & body
- Mill/Drill with BMT85 tooling

Options include

Mill/drill turret, BMT65 tooling



SMEC SL3500B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 117.5mm bar capacity with 15" chuck
- 850mm maximum swing
- 780/1530/2125mm maximum turned length
- 30 m/min rapid traverse X/Z axis
- 12 station bi-directional turret
- Programmable tailstock quill

Options include

Mill/drill turret, Y axis, sub-spindle, BMT65 tooling



SMEC SL4500B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 181mm bar capacity with 21" chuck
- 630mm maximum swing
- 520mm maximum turned length
- 18/12/24/24 m/min rapid traverse X/Y/Z/B axis
- 12 station bi-directional turret

Options include

Mill/Drill, Y-axis, BMT75 tooling



SMEC SL5500B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 165.5mm bar capacity with 21" chuck (**24" and 255mm bore opt**)
- 800mm maximum swing
- 1071/2230mm maximum turned length
- 20m/min rapid traverse X/Z axis (1m bed)
- 12 station bi-directional turret
- Programmable tailstock quill & body
- Mill/Drill with BMT85 tooling

Options include

Mill/drill, BMT85 tooling



SMEC SL6500B

Standard Features

- Fanuc OiTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 140mm bar capacity with 24" chuck (320mm bore opt)
- 1030mm maximum swing
- **1000/2070/3200/5050mm maximum turned length**
- 12/18m/min rapid traverse X/Y axis
- 12 station bi-directional turret

Options include

Mill/Drill, Y-axis, BMT75 tooling



SMEC SL2000T2Y2 - Twin Turret, Twin Spindle, Twin Y Axis

Standard Features

- Fanuc 32iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- 67mm bar capacity with 21" chuck (24" opt)
- 230mm swing over bed
- 662mm maximum turned length
- 40m/min rapids
- 12/24 position turret
- BMT65 tooling

CNC VMCs

760XP, 1000XP, 1350XP, 1600XP, 2000XP & 2600XP

100% manufactured in Taiwan, hundreds of machines installed in the UK in the last 20 years

Available with Fanuc, Mitsubishi, Siemens & Heidenhain controls

Standard Features

- Up to 12,000rpm spindle speed (15,000rpm opt)
- Compact construction for reduced footprint
- 44m/min rapids
- BT40 spindle taper as standard, CAT option
- **36 station twin arm ATC options (28 on 76XP)**
- Through spindle coolant
- Heavy duty linear ways on all axes
- **Through spindle coolant**
- **Swarf conveyor**
- Chip flushing

Options include

- 4th axis rotary table
- 4/5th axis table
- Probing



Model Shown - Dugard 1000XP

Cost Effective CNC VMCs

550, 760, 1000, 1350 X travel

Dugard 550 available at just £30,000

Available with Fanuc, Siemens & Mitsubishi controls

Standard Features

- 11,000rpm spindle speed (std)
- Compact construction for reduced footprint
- BT40 spindle taper as standard, (CAT opt)
- 20, 24 & 28 station carousel ATC options
- Linear ways on all axes



Model Shown - Dugard 1000



Model Shown - Dugard 760

Heavy Duty CNC VMCs

HD1363, HD1680, HD1886 & HD2210

Made in Taiwan, the unique configuration with the X slideway under the Y slideway offers a fully supported table across the full X-axis movement, eliminating table overhang and X-axis distortion whilst having a 40% smaller footprint. Choice of boxway or rollerway guide systems.

Available with Fanuc, Heidenhain and Siemens controls

Standard Features

- Refrigerated ballscrews on X, Y and Z axes
- 24/32 station bi-directional twin arm type tool changer
- Available in heavy duty boxway or linear roller ways
- BT50 geared head 6,000/8,000rpm
- Optional BT40 10,000/12,000rpm direct drive spindle
- X axis travels from 1,300~2,200mm
- Y axis travels up to 1000mm



Unique slideway design



Model Shown - Dugard HD1886B

CNC Bridge Type VMCs

LB Range

Large capacity and ease of operation with powerful cutting capability

Available with Fanuc, Heidenhain & Siemens controls

Standard Features

- Refrigerated ballscrews on X, Y and Z axes
- 2200~4200mm X axis travels
- 1600 & 2700mm optional Y axis travels
- 850~1100mm Z axis travel
- BT50 6000rpm with 2 step gearbox or BT50 10,000rpm direct drive spindle
- up to 15,000kg table capacity



Model Shown - Dugard LB3216

5 Axis CNC Machining Centres Dugard X5-320, X5-800

High Speed 5 Axis Machining Centres

Available with Heidenhain,
Fanuc and Siemens controls

Standard Features

- 320mm / 800mm diameter table
- 30 station ATC (X5-320)
- 32~128 station ATC (X5-800)
- 15,000rpm direct drive spindle speed (X5-320)
- 18,000rpm direct drive spindle speed (X5-800)
- **Full 5 axis capability or 4 + 1**
- **Kessler torque table (X5-800)**



Model Shown - Dugard X5-320

5 Axis CNC Machining Centres Dugard GTX620

High Speed Travelling Column 5 Axis Machining Centre

Available with Heidenhain, Siemens
or Fanuc controls

Standard Features

- 12,000 direct drive spindle (15,000/24,000rpm opt)
- Large capacity 650mm trunnion table
- Large door opening system with exceptional access to the work area for loading and setting
- 40 station ATC (60 opt)
- 36m/min rapids
- **Full 5 axis simultaneous or 4+1 milling capability**

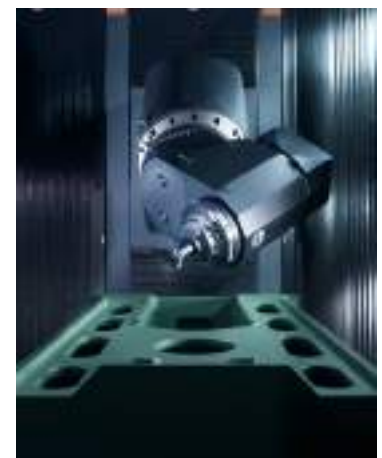


European Built High Quality 5 Axis Moving Column Machining Centres

IBARMIA.

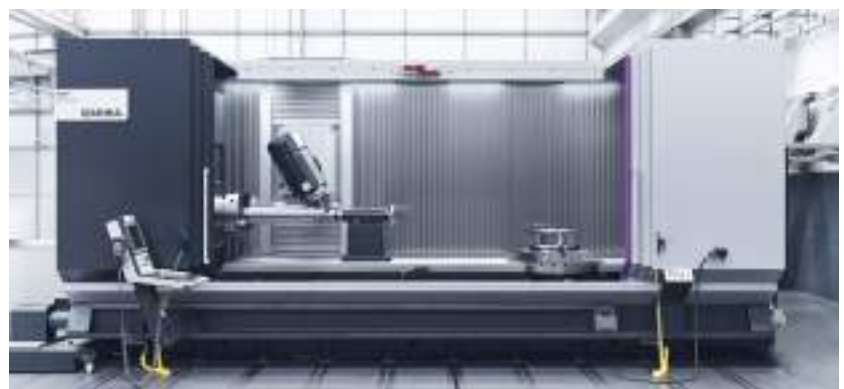
T Series Universal 5 Axis Machining Centres

- Heidenhain or Fanuc controls
- 1000, 1250, 1600, 1800, 2200mm diameter table sizes, all with turning option
- Twin or multi pallet options
- BT50 or HSK spindles up to 75kW



Z Series Travelling Column 3/4/5 Axis Vertical Machining Centres

- Heidenhain or Fanuc controls
- Up to 12m X travel
- BT40, BT50 or HSK63, HSK100 spindle tapers
- Up to 75kW spindle power
- 600, 800, 1000mm diameter built in rotary tables, all with turning option



Standard & CNC Grinders

The biggest manufacturer of surface grinders worldwide. Made in Taiwan and partnered with Dugard since 1985

CHEVALIER[®]

CNC Surface Grinder Smart Series III

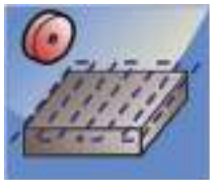
- Conversational control
- 450mm~2000mm longitudinal travels
 - 210~610mm cross travels
 - Spindle power up to 18kW

SMART CNC Control USB Device and CF Card Function

Users can import and export programmes and files with either USB device or a CF card. Uploading or downloading programmes is now more convenient



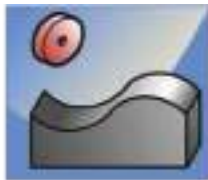
Model Shown - Chevalier SMART B1224III



Surface Grinding



Slice Grinding



Profile Grinding



TaskLink



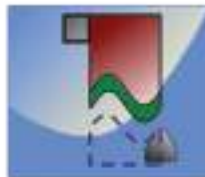
Table Type Single Tip Dresser



Table Type Diamond Roller



Over the Head Diamond Roller



Profile Dressing



Interface Design

The three-dimensional graphic image display minimises text descriptions and looks very similar to the actual workpieces

CNC Travelling Column Surface Grinder New Model - Chevalier FMG B1224

- SMART CNC fully conversational control
- simplified programming
- 710mm longitudinal travel
- 350mm cross travel
- 500~2500rpm spindle speed



Model Shown - Chevalier FMG B1224

CNC Double Column Surface Grinder

- SMART CNC fully conversational control
- Simplified programming
- Up to 35,000kg maximum table load
- 500~2000rpm variable spindle speed
- Up to 25HP spindle power
- Up to 12,000rpm longitudinal travel



Model Shown - Chevalier FSG 5080DC

Column Type 3 Axis Automatic Surface Grinder

Standard Features

- 450~3000mm longitudinal travel
- Auto downfeed with roughing and finishing cycles
- Variable speed spindle

AD Control - Standard Features

- 10.4" TFT high resolution 65.536 pixel colour touch panel control interface
- Powerful graphic conversational function with surface/plunge standard built-in grinding programme
- Brief and clear operation manual
- Mechanical coordinates and relative coordinates display
- Operation friendly, grinding, wheel dressing and automatic compensation can be accomplished easily without making CNC programme



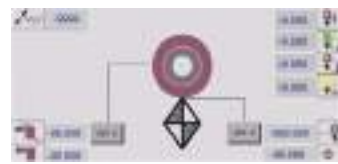
Model Shown - Chevalier FSG1224ADIII



Plunge Grinding Mode



Surface Grinding Mode



Automatic Dressing on Table (opt)



Automatic Overhead Dresser with Compensation (opt)



Crisscross Grinding Mode



Multi-Groove Grinding Mode

Collaborative Robots

Integrate loading / unloading
with your machine tool



Hanwha

One of Korea's largest corporations

Hanwha Collaborative Robot (Cobot)

HCR Series

- **Affordable automation** - up to a third less than regular industrial robots
- **Robots that fully integrate with your team**
- **Easy programming and hand guided teach function**
- **Can be used in most cases without guarding** - fitted with operator collision protection
- **User friendly Graphic User Interface**
- **0.01mm positional accuracy**
- **Compact and light body** - integrated actuators with hollow shaft on each joint
- **Easy Connection** - standard industrial attachment fittings and interface protocols, DIO or Ether CAT port to directly connect with accessories
- **Use anywhere** - small footprint and flexible mounting options means there's no need to alter product layout
- **Cleanroom class ISO 2**

Meet your new team member

Model Shown - Hanwha HCR-5

DUGARD

Over 80 years providing machine tool solutions

At Dugard we're famous for our comprehensive selection of machine tools, with the widest range in the UK of horizontal and vertical lathes, machining centres, borers, grinders and cobots - available to suit any size machine shop no matter what your budget.

Dugard Agencies

In addition to our extremely popular Dugard range, we also represent Hanwha, Kitamura, SMEC (Samsung), Chevalier Ibarmia, Tos Varnsdorf, and Honor Seiki. Designed, developed and manufactured in the engineering and technology hubs of Japan, Korea, Taiwan, Germany and Czech Republic, these brands each represent innovative excellence in their respective specialities, dominating their chosen industries.

Dugard Sales Team

The Dugard head office is in Hove, East Sussex and that's a brilliant place for a machine demonstration with one of our sales team. However, our sales team are based all over the UK so if you need any help or information they're never far away and they can always pop in to see you.

Dugard Technical Support

Much of our success stems from our reputation for providing first class after sales support and service. We have an extensive team which covers machine service, spare parts and programming assistance. We make sure that we action all queries and requests quickly and economically.

Dugard Applications Department

Our team of applications engineers is available before and after a machine is installed at a customer's site, offering programme training and advice on our full range of machines, anything from programming and tooling advice to control communications and parameters.

Dugard Service Department

With factory trained service engineers to install and commission all the new machines sold in addition to making breakdown visits, we have a busy team working all areas of the country. In the event of a breakdown our in-house technical support staff initially offer advice over the phone, we aim to have engineers out on an emergency breakdown the next working day. Every reported fault is of the utmost importance to us so we work hard to have it fixed as soon as possible.

Dugard Spares and Accessories Department

Our Head Office in Hove has 2,000 square feet of dedicated spare parts storage. We also have a small team in Taiwan allowing us to liaise with our suppliers (both old and new), ensuring that an extensive range of spare parts is always available. We supply the Dugard CNC range of machines to dealers throughout Europe and the rest of the world. This makes our main facility in the UK the central hub for machines and spares.

CHEVALIER

 Hanwha

IBARMIA

 **KITAMURA**

 **SMEC**
MACHINE TOOLS

DUGARD

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