



At the Forefront of the Industry over 80 years

**DUGARD**

1940 1950 1960 1970 1980 19



## Samsung Machine Tools Engineering Company

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

- ▶ Fanuc 0iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- ▶ 67mm bar capacity with 8" chuck
- ▶ 540mm maximum swing
- ▶ 540mm maximum turned length (1000mm opt)
- ▶ Unique Hexahedral boxway slideways

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



### SMEC SL2500B

- ▶ Fanuc 0iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- ▶ 76mm bar capacity with 10" chuck
- ▶ 540mm maximum swing
- ▶ 880mm maximum turned length (1000mm opt)
- ▶ Unique Hexahedral boxway slideways

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



### SMEC SL3000B

- ▶ Fanuc 0iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- ▶ 90mm bar capacity with 12" chuck
- ▶ 650mm maximum swing
- ▶ 880mm maximum turned length (1100mm opt)
- ▶ Unique Hexahedral boxway slideways

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



### SMEC SL3500B

- ▶ Fanuc 0iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- ▶ 117.5mm bar capacity with 15" chuck
- ▶ 850mm maximum swing
- ▶ Unique Hexahedral boxway slideways

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

Get in touch with our sales team.

Want to know more about any of the SMEC Machines?

sales@dugard.com

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Made In Korea



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### SMEC SL4500B

- ▶ Fanuc 0iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- ▶ 181mm bar capacity with 21" chuck
- ▶ 630mm maximum swing
- ▶ 520mm maximum turned length
- ▶ Unique Hexahedral boxway slideways

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



### SMEC SL5500B

- ▶ Fanuc 0iTF (Manual Guide i) or Siemens 828D (Shopturn) controls
- ▶ 165.5mm bar capacity with 21" chuck (24" and 255mm bore opt)
- ▶ 800mm maximum swing
- ▶ Unique Hexahedral boxway slideways

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



### SMEC SL6500B

- ▶ Fanuc 0iTF (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
- ▶ Unique Hexahedral boxway slideways

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



### SMEC NS2000B / NS2000BM

- ▶ Fanuc 0iTF with 10.4" screen
- ▶ 570mm swing over bed
- ▶ 310mm swing over cross slide
- ▶ 8" chuck
- ▶ 76mm bore
- ▶ Machine Weight 2940KG / 3190KG
- ▶ Linear way Machines

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



### SMEC NS2100Y / NS2100SY

- ▶ 10.4" Screen with Fanuc 0iTF Plus control
- ▶ 820mm swing over bed
- ▶ 540mm swing over cross slide
- ▶ 8" chuck
- ▶ Rotary tool speed 6000rpm
- ▶ 30/10/36 m/min X/Y/Z Rapid traverse
- ▶ Linear way Machines

Options include  
Sub-spindle and Y axis options



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

- ▶ 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

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

## 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".

### Supercell 300 & 400G Horizontal 5 Axis Machining Centres

- ▶ Unrivalled accuracy  $\pm 2$  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



Model Shown - Kitamura HX400IG



### HX Series Horizontal Machining Centres

- ▶ Unrivalled accuracy  $\pm 2$  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)

Made in Japan



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Model Shown Kitamura Mytrunnion 4G



### Mytrunnion 5 Axis Machining Centres

- ▶ Unrivalled accuracy  $\pm 2$  microns positional accuracy (full stroke)  $\pm 1$  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

Model Shown Kitamura Medcentre 5AX



### Medcenter 5AX 5 Axis Vertical Machining Centre

- ▶ Arumatik-Mi control
- ▶ Table size 170mm
- ▶ 20kg table load
- ▶ Spindle torque 14.6/ 10 minutes
- ▶ Tool storage capacity 40 tools

Model Shown - Kitamura Mycenter 3XD



### Mycentre Vertical Machining Centres

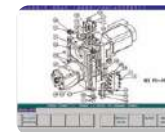
- ▶ X travels available 762mm to 1050mm
- ▶ Unrivalled accuracy  $\pm 2$  microns positional accuracy (full stroke)
- ▶ 1 micron repeatability
- ▶ Rapid traverses 50m/min
- ▶ BT40 4 range spindle 20,000rpm
- ▶ 30 ATC



Customisable Icon Screen



Work Set Assistance



Maintenance Support Function

### Arumatik Control *Arumatik Mi*

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 compatible

Completely customisable and expandable user experience

Video guidance and visual programming screens

Anywhere-Remote® email status updates

Positioning Accuracy  $\pm 0.002$ mm / Full Stroke Repeatability  $\pm 0.001$ mm

Get in touch with our sales team.

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## Unbeatable Price and Performance Combination



Model Shown - Dugard 760

### CNC VMCs 550, 760, 1000, 1350

Dugard 550 available at just £30,000

Available with Fanuc, Siemens & Mitsubishi controls

- ▶ 11,000rpm spindle speed (std)
- ▶ Compact construction for reduced footprint
- ▶ BT40 spindle taper as standard, (CAT opt)
- ▶ 28 station ATC option
- ▶ Linear ways on all axes
- ▶ Twin arm ATC as standard



Model Shown - Dugard 1000XP

### 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.

- ▶ 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



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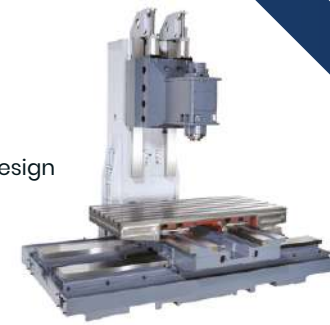
Made In Taiwan



Model Shown - Dugard HD1886B



Unique slideway design



### 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

- ▶ 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 spindle 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



Model Shown - Dugard LB3216



### CNC Bridge Type VMCs LB Range

Large capacity and ease of operation with powerful cutting capability

Available with Fanuc, Heidenhain & Siemens controls

- ▶ 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 X5-320

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

High Speed 5 Axis Machining Centres

Available with Heidenhain, Fanuc and Siemens controls

- ▶ 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 GTX 620

## 5 Axis CNC Machining Centres Dugard GTX620

High Speed Travelling Column 5 Axis Machining Centre

Available with Heidenhain, Siemens or Fanuc controls

- ▶ 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



Hanwha machines are more competitive on price, have higher power and some models are approximately 20% heavier than most of the competition.

Program assist software is a software to help make machining programs with ease.

- ✓ 3D Modeling
- ✓ Extracting 2D drawing
- ✓ Tool path check with graphic representation
- ✓ Calculating C/T
- ✓ Predicting the collision



### Hanwha XP Series

- ▶ Cost effective 4 axis entry models offering an effective solution to simple parts
- ▶ Available in 16mm, 20mm, 26mm and 32mm spindle sizes



### Hanwha XD Series

- ▶ Flagship range of Multi axis models for High precision and complex machined parts
- ▶ Available in 3mm, 7mm, 12mm, 16mm, 20mm, 26mm, 32mm, 38mm and 42mm spindle sizes
- ▶ Available in H, N and NH configurations



### Hanwha XE Series

- ▶ Entry level 5 axis model offering affordability with a stable and high production Sliding head lathe
- ▶ Available in 20mm, 26mm and 35mm spindle sizes
- ▶ Available in H, N and NH configurations



### Hanwha STL Series

- ▶ 3 path control that is extremely powerful turret type sliding head lathe
- ▶ Available in 32mm, 38 and 42mm spindle sizes
- ▶ Available in H, N and NH configurations
- ▶ Industry standard Guide Bushes & Collets for ease of interchangeable

Hanwha provides chip cutting solution to break long and curled chips into small pieces.

- ✓ Better tool life
- ✓ Chip trouble free
- ✓ Build-up edge free
- ✓ Coolant usage

# IBARMIA.

## High Value Added Solutions

With a strong European engineering base IBARMIA offers standardized and customized solutions worldwide to leading users in sectors such as aerospace, energy, machinery and subcontracting. Automation and unmanned operation, multi-tasking, additive manufacturing and connectivity are the fundamentals of new developments.



### T Series Universal 5 Axis Machining Centres

Moving column machining centres with fixed table

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



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

Universal moving column 5 axis 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
- ▶ Classic models
- ▶ Mill/turn capacity

Made In Spain



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your  
machine  
-tool  
point



## C Series Large Diameter Ring Production Centres

Machining solutions for large circular pieces. Turning, drilling and grinding centers for flange and bearings up to  $\varnothing 8500$  mm

- ▶ Single or twin ram available
- ▶ Hi torque turning
- ▶ Grinding option

Get in touch with our sales team.

Want to know more about any of the Kitamura Machines?



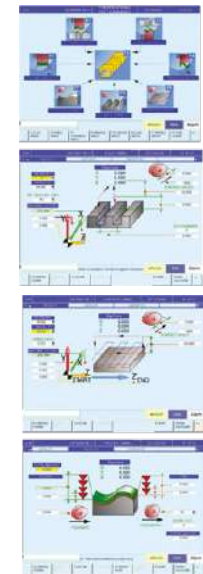
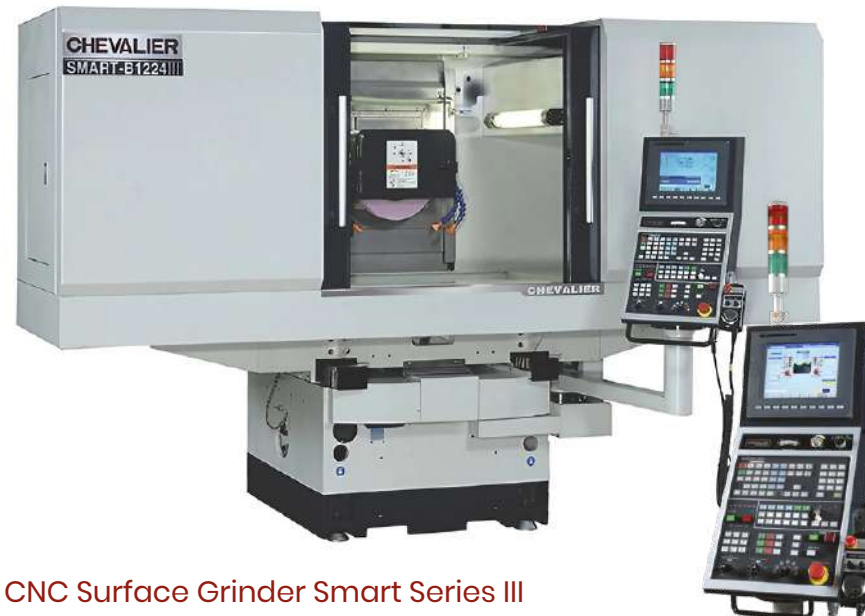
[sales@dugard.com](mailto:sales@dugard.com)



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### 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

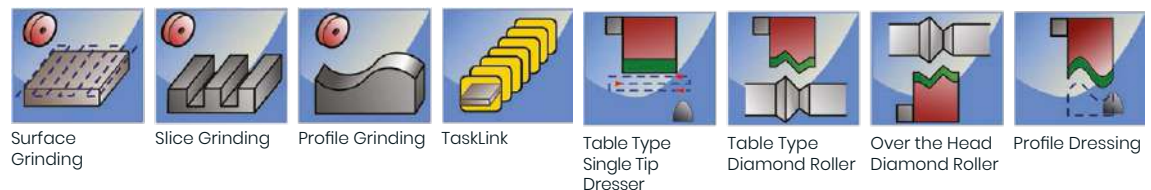


### CNC Surface Grinder Smart Series III

- ▶ 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

#### Interface Design

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





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Made In Taiwan

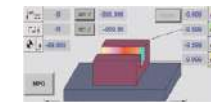
### CNC Travelling Column Surface Grinder New Model - Chevalier FMG B1224

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- ▶ 350mm cross travel
- ▶ 500~2500rpm spindle speed

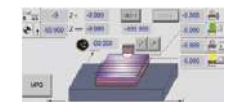


### Column Type 3 Axis Automatic Surface Grinder

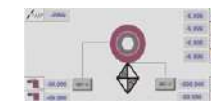
- ▶ 450~3000mm longitudinal travel
- ▶ Auto downfeed with roughing and finishing cycles
- ▶ Variable speed spindle
- ▶ AD Control - Standard Features
- ▶ 10.4" TFT high resolution 65.536 pixel colour touch panel control interface
- ▶ Powerful graphic conversational function with surface/plunge standard 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



Plunge Grinding Mode



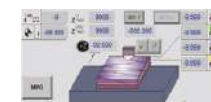
Surface Grinding Mode



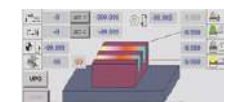
Automatic Dressing on Table (opt)



Automatic Overhead Dresser with Compensation (opt)



Crisscross Grinding Mode



Multi-Groove Grinding Mode



Experience the reliability  
of a brand with worldwide  
recognition and a long history

For more than 70 years, the Pinacho brand has been recognised worldwide for its technologically innovative characteristics and for the precision and versatility of all its models.

Model Shown - Pinacho SH-400



### Pinacho SH Series

Large capacity CNC lathes with up to 4 controlled axes

- ▶ Fagor 8055T Control
- ▶ 8-position automatic turret with 4 toolholders
- ▶ Gearbox 2 ranges
- ▶ CE Standard
- ▶ Dynamic graphics/trajectory
- ▶ Remote jog unit

Model Shown - Pinacho ST-310



### Pinacho ST Series

Siemens 828D control with 3 range electronic speed variator

- ▶ Headstock with variable speed 3 ranges
- ▶ Rear and chuck anti-projection guard
- ▶ Manual central lubrication
- ▶ Rigid protection of the standard spindle
- ▶ Refrigeration equipment
- ▶ CE Standard
- ▶ Cast iron pedestals

Model Shown - Pinacho SE 250



### Pinacho SE Series

Siemens 808D control with 3 range electronic speed variator

- ▶ Siemens 808D control
- ▶ Electronic handwheel for X and Z axes
- ▶ Reducing bush of main shaft and dead center
- ▶ Manual quick-change toolpost
- ▶ Refrigeration equipment
- ▶ CE Standard
- ▶ Headstock with electronic speed variator 3 ranges

Made In Spain



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Proudly Working Alongside



# Over 80 years providing machine tool solutions

At Dugard we're famous for our industry-leading range of machine tools, with the UK's widest range of horizontal and vertical lathes, machining centres, borers, grinders and cobots.

Dugard started from humble roots as a family-owned used machine tools business - but though we have risen to become one of the UK's most successful CNC machine manufacturers, we still believe in that personal touch. Our customers come from all sectors and in all shapes and sizes, from small businesses and subcontractors to international OEMs.

"It's the combination of reliable, high-quality machine tools and expert advice and customer support that keeps us coming back to Dugard with each new investment we make."

*Darren Wilson*  
Wilson Tool & Engineering



## Machines from World-Leading Manufacturers

In addition to our extremely popular Dugard range, we also represent Kitamura, SMEC, Hanwha, Ibarmia, Pinacho and Chevalier. Designed, developed and manufactured in the engineering and technology hubs of Japan, Korea, Taiwan and Spain, these brands each represent innovative excellence in their respective specialities, dominating their chosen industries.



## Expert Sales Support

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 are always happy to make an appointment to see you.



## Technical Expertise and Knowledge

We're believers in continuing to support our customers with first-class after-sales service. We support each of our customers with machine service, spare parts and programming assistance, ensuring your machines continue to deliver productivity and profit.

Proudly Working Alongside

**IBARMIA.**

**KITAMURA®**

 Hanwha

**SMEC**

**CHEVALIER.**

***Pinacho***

**DUGARD**

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