

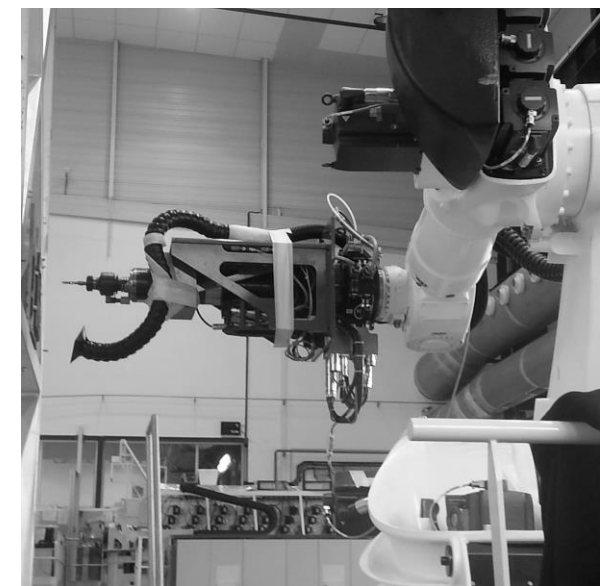
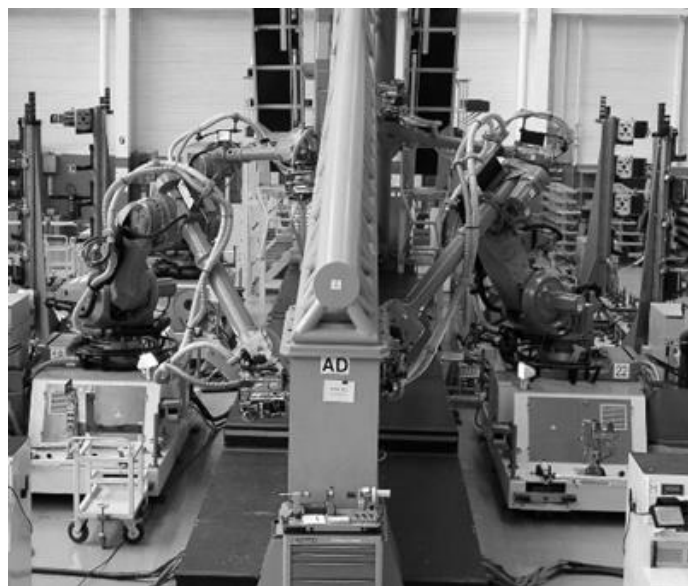
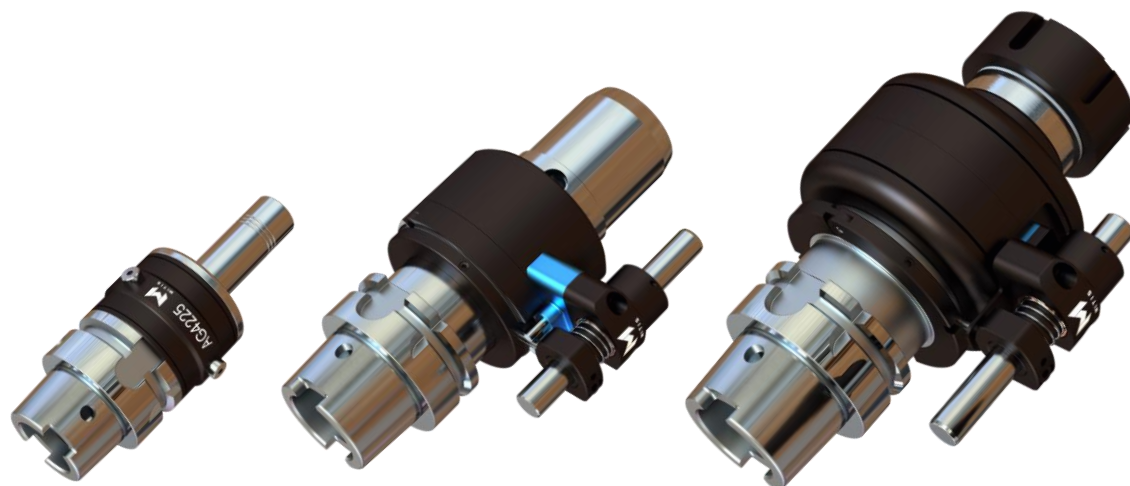


MITIS




PG LINE FOR AUTOMATION

MITIS Vibration tool holders

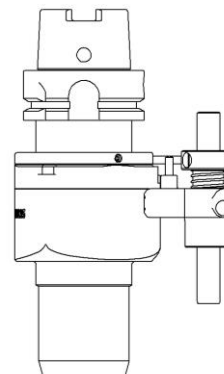
3 Product lines
AG / PM / PG



Compact*Designed for production on Robot, Flextrack and Gantry***Standard***Designed for production on most NC machines and Robot***Versatile***Designed for test services and flexible production***PM 6835**

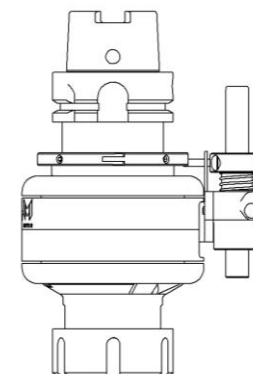
ISO  40 50
 BT  40 50
 HSK  63

Hydrau  20

**PG 8045**

ISO  40 50
 BT  40 50
 HSK  63

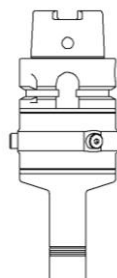
ER Collet  40

**AG 4225**

HSK  40 50

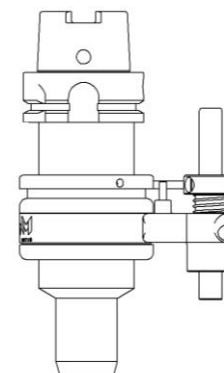
Hydrau  12

Tribos-S  12 20

**PM 4730**

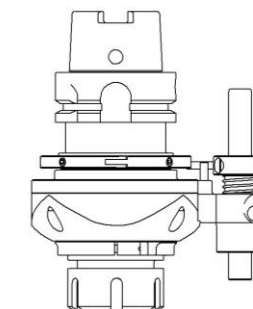
ISO  40
 BT  40
 HSK  63

Hydrau  12 20

**PG 8040**

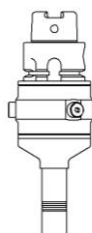
ISO  40
 BT  40
 HSK  63

ER Collet  32

**AG 3017**

HSK  32 40

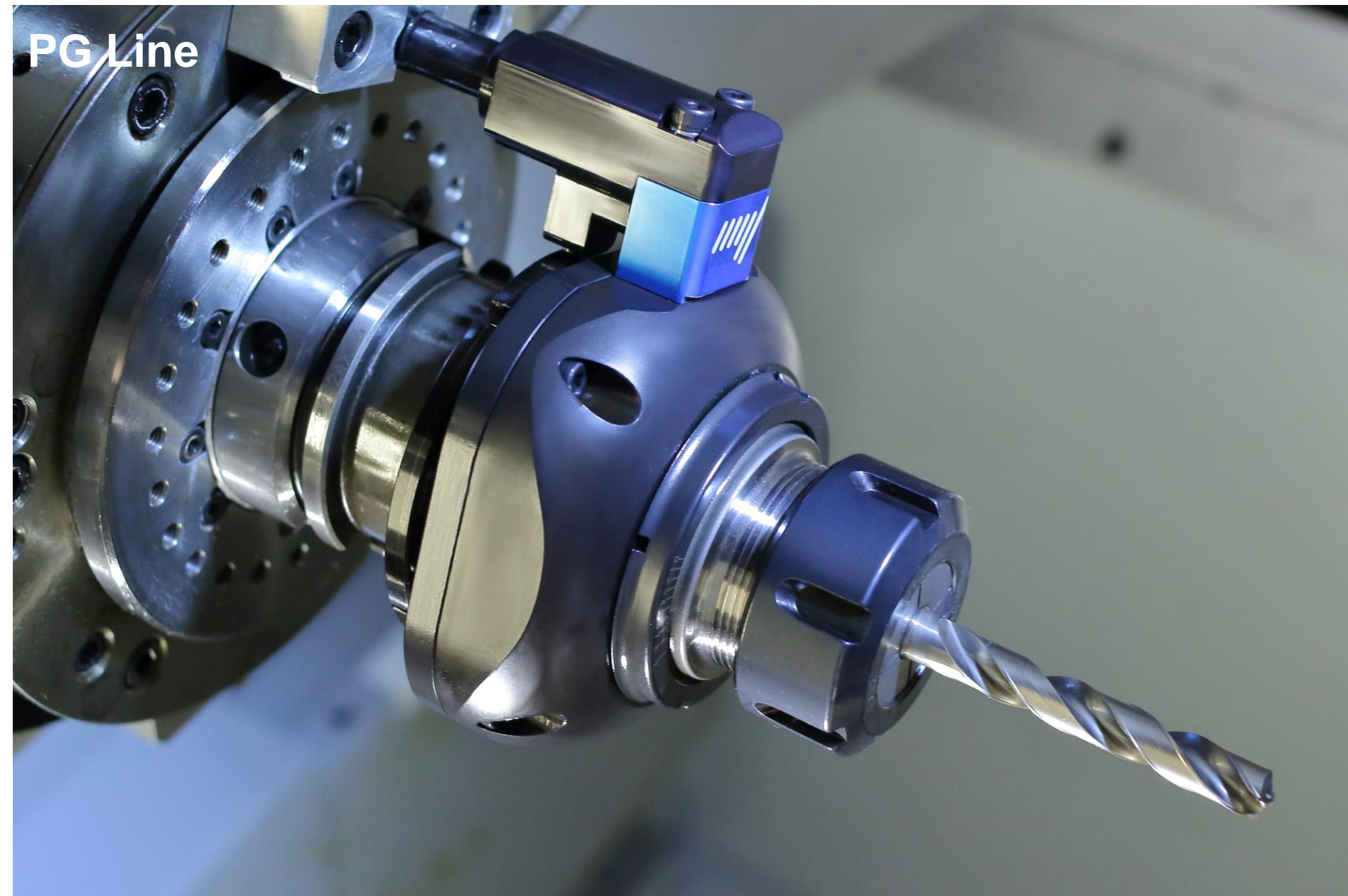
Tribos-S  8 12



Designed to meet most automation requirements while offering outstanding performances for Aerospace stack drilling

Other tool shanks and spindle attachments available on demand

PG Line



PG Line

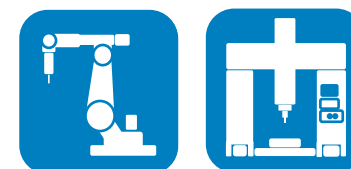
Made to Develop

The adjustable and flexible to meet the needs of test and innovation services - R&D/T department ; university ; toolmaker



Machine

HSK-63 / ISO 40-50 / BT 40-50



Application

Aerospace Drilling and Countersinking



CFRP	CFRP	Al	Al
Ti	Al	Ti	Al

Vibration Technology

Equipped with our mature and adjustable mechanical VAD technology to ensure outstanding performance on aerospace stack drilling applications.



Benefits proposed

- **Cycle time** by removing peck drilling cycle and limiting multi-shot processes ;
- **Reliability** by securing chip fragmentation / chip control and drilling temperature ;
- **Quality** by securing hole diameter ($C_p > 1,3$) and composite integrity while mastering internal / external height burrs to avoid post additional work ;
- **Green** by limiting the quantity of lubrication – MQL, Air, Dry ;
- Sustainable to meet a “**One-way assembly process**” challenge.



PG8040



PG8045



On shelf

HSK-A 63
ISO or BT 40
ER Collet 32

HSK-A 63
ISO or BT 40/50
ER Collet 40

Vibration
Technology

Frequency
Factory setting* 3 / 5 oscillations
Amplitude
Adjustable setting*
From 0 (No Vibration) to 0,25mm

Frequency
Factory setting* 3 / 5 oscillations
Amplitude
Adjustable setting*
From 0 (No Vibration) to 0,50mm

**For driving an efficient drilling process, Mitis proposes you the necessary expertise completed with documented decision supports tools allowing to deliver a winning setting solution*

Lubrication

Internal lubrication
Dry / Air Blast / MQL

RPM

Max. 8000 if 3 oscillations
Max. 5900 if 5 oscillations

Max. 3000

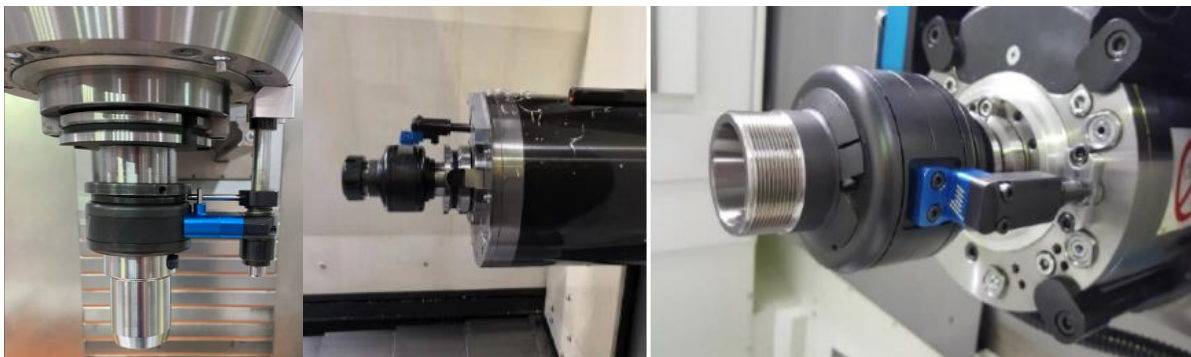
One shot
Drilling Ø

Max. Ø12,7mm in Titanium
Max. Ø14,1mm in Aluminium

Max. Ø25,4mm

PG Line

Implementation



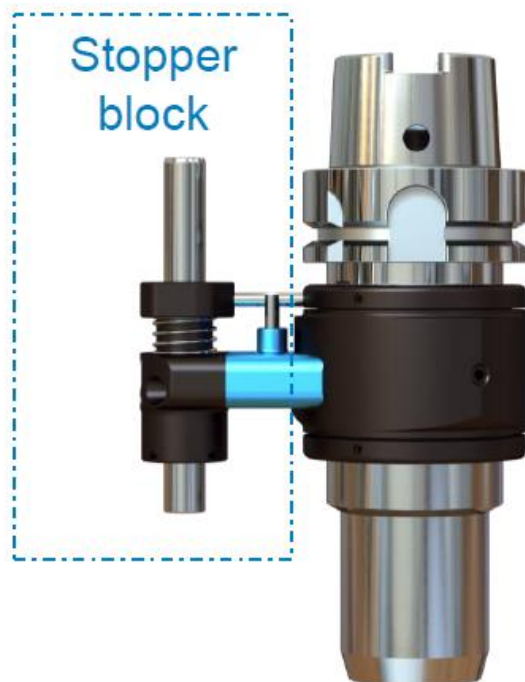
Plug in as a regular tool holder

Vibration assistance

No additional energy

On with RPM turning

Off when RPM is stopped



 YouTube

<https://www.youtube.com/watch?v=Puwv5oALbvo>

Stopper block connection is only required

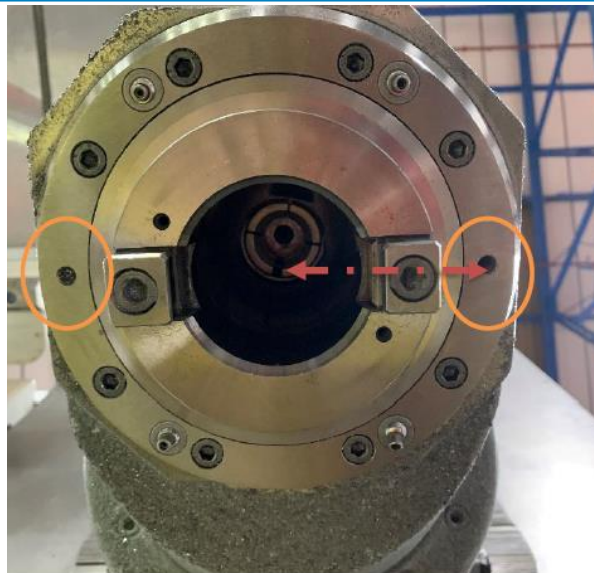
Simple rotating stop, no additional features



Compatible with automatic tool change

YouTube Mitis tutorial
step-by-step process to achieve it safely

PG Line

Implementation



Mitis Question	Customer needs
2 Tapped holes ? 	Yes
Depth and M size ?	M8 Depth 10mm
Distance Spindle axis – Tapped hole 	82mm

MITIS provides

Female part or adapter
Screw

Customer experience



Nantes, **France**

World Leader in Vibration Drilling Systems

7 international patents ; R&D 25% of turnover

10 years of Industrialization on Assembly lines

AIRBUS  **BOEING**

 **DASSAULT**
AVIATION

 **EMBRAER**

 **MITSUBISHI**
AIRCRAFT CORPORATION

28000 systems sold since 2011 - World market





Julian LONFIER

Applications and Business Development - Manager

jlonfier@mitis.fr

+33 6 34 48 42 10

12, rue Johannes Gutenberg / 44340 BOUGUENNAIS - SAS au capital de 600 000€ - RCS Nantes 495 352 528