

**MPP** Micro Point Pro

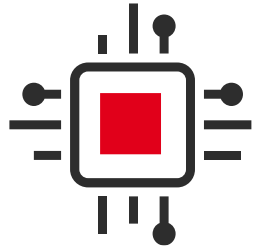
**Precision ■**

**Innovation ■**

**Quality ■**

**Professionals in Micro Tools**

# About us



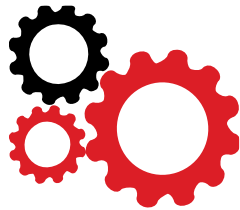
A leading customized solutions provider for the semiconductors and micro-electronics assembly industry



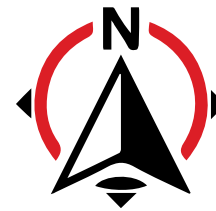
40 years of experience and expertise



Providing solutions to a wide array of market leaders & segments



A leading OEM of Manual Wire Bonders



We master the whole production process: raw material → end product



Located in the north part of ISRAEL supported by 170 employees

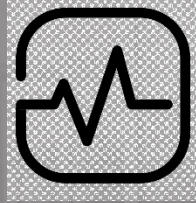


# Applications & Market's Segments

Automotive



Medical



Aviation & Aerospace



Internet of Things



Home appliances



Solar



LED



Precision parts



Defense & Federal



# Our Leading Customers



# MPP's Basket of Solutions

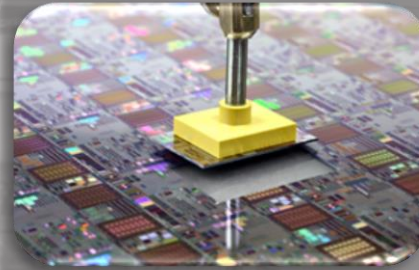
Small & Large wire  
Wedges



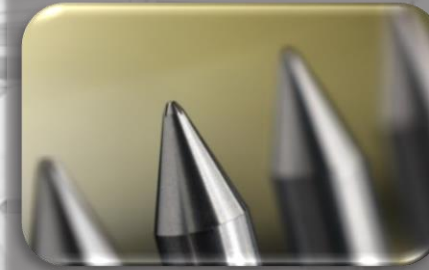
Die Collets



Pick & Place  
Flip Chip



Dispensers



Nozzles & SMT



"Build to Print /  
Spec" Services



Customized Ceramic  
& Hard Metal  
Products



Manual Wire  
Bonders



Thin Film Coatings



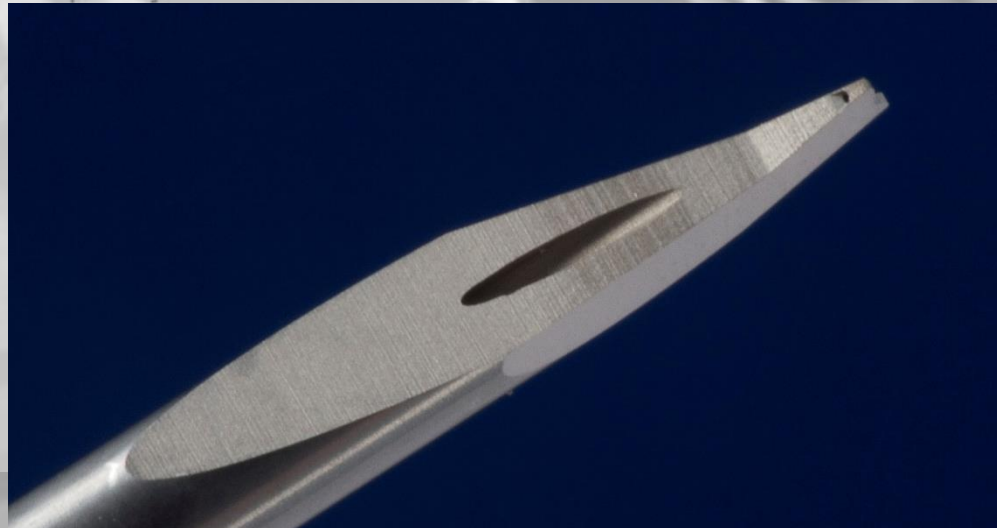
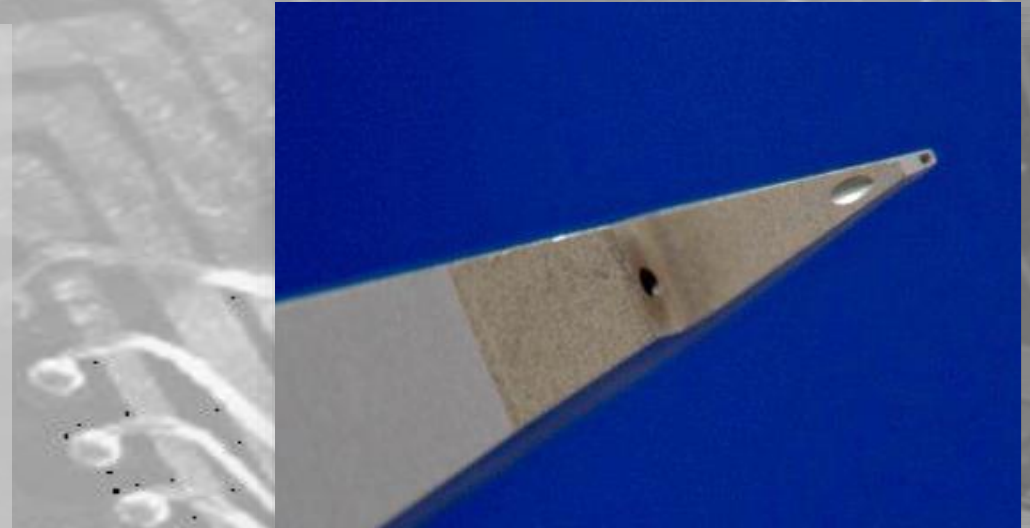
Probe Heads  
For Wafer Resistivity  
Check & others





# Wedge Bonding Tools

- MPP is no' 1 wedge supplier WW
- Custom wedge tools to support customer's application
- Short Lead Time
- High Quality Wedges - accurate, precise, high repeatability
- Suitable for all Bonders / Makers
- Offering solutions to variety of applications –Std & Customized:
  - Fine pitch
  - Deep access
  - UFP
  - COB
  - Ribbon

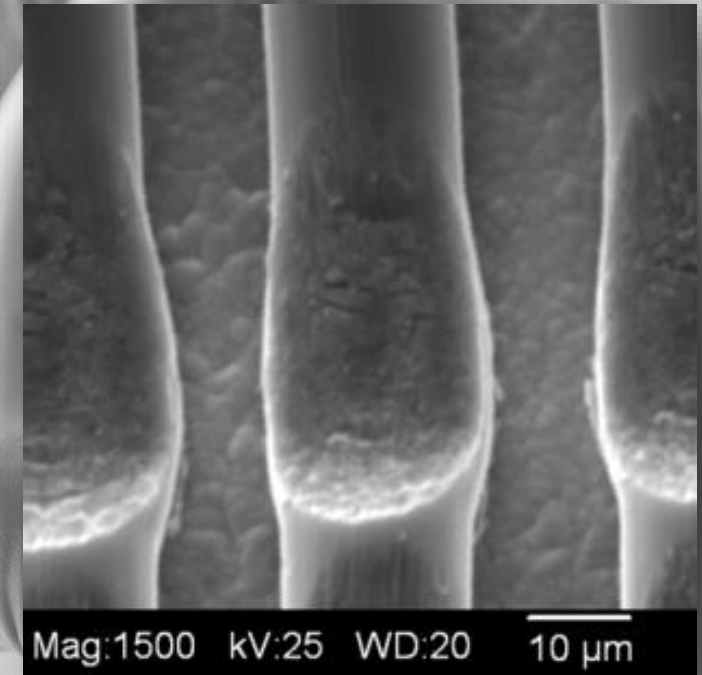
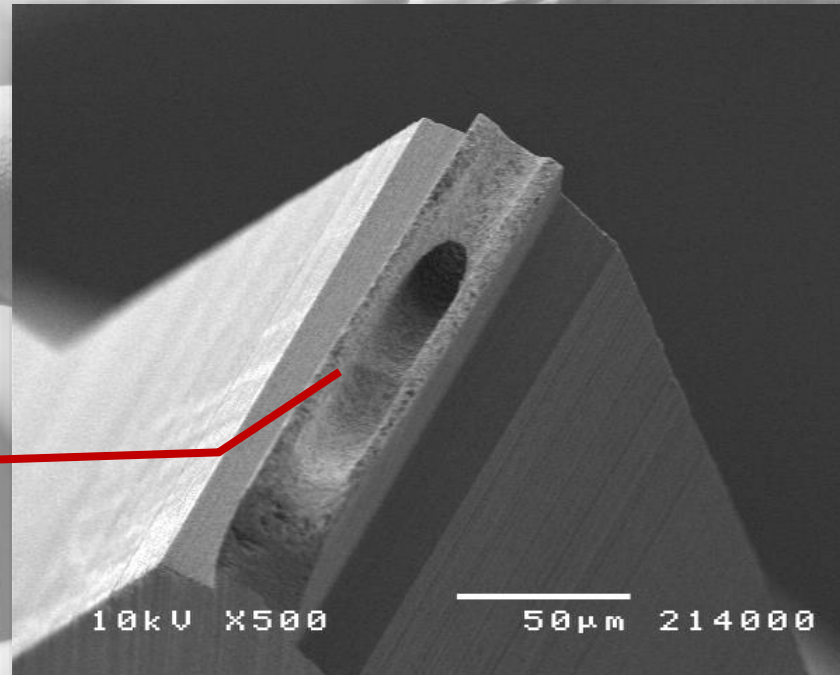


# Ultra Fine Pitch wedge \* (patent)



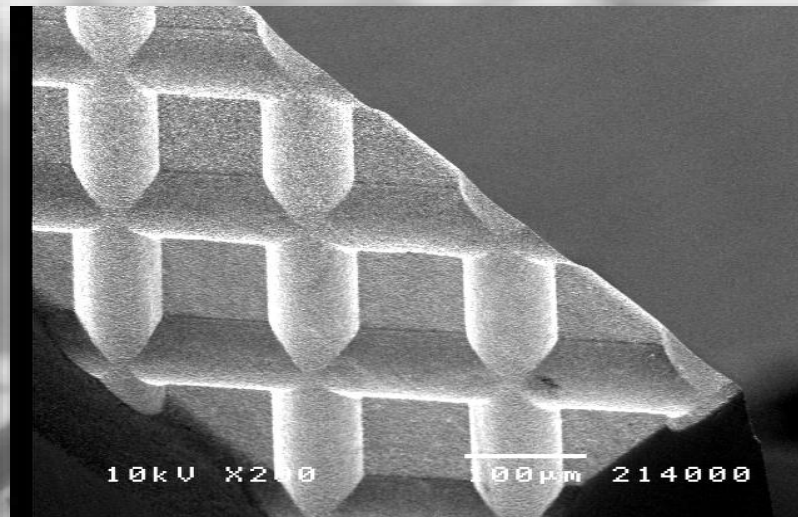
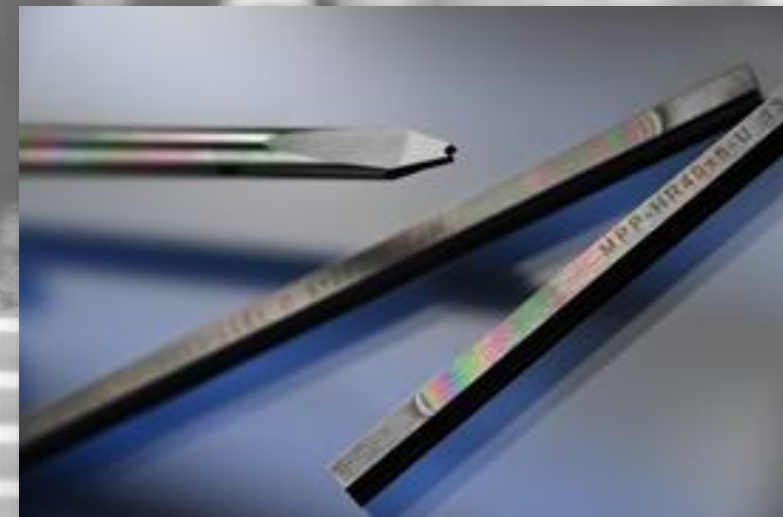
- Lower loop & finer pitch vs capillary achieved by:
  - Unique thin design
  - Centered open pocket

Wall  
Thickness  
~ 7  $\mu$



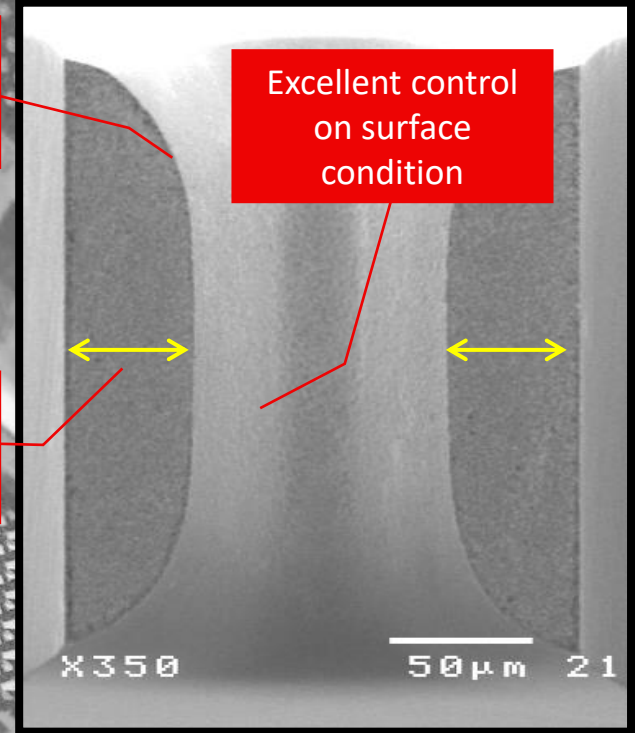


# Heavy (Large) Wire Wedge & Ribbon



Accurate Radius

Accurate dimensions



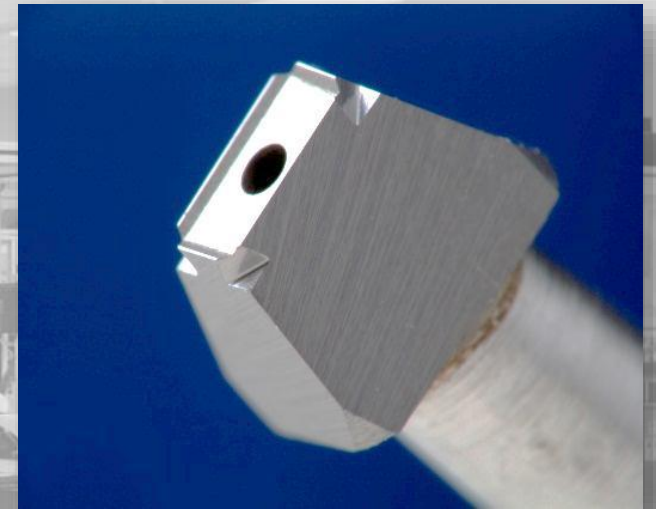
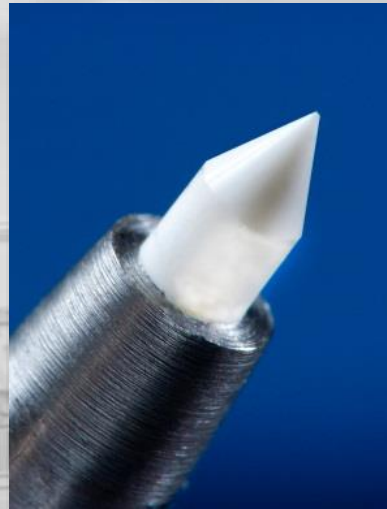
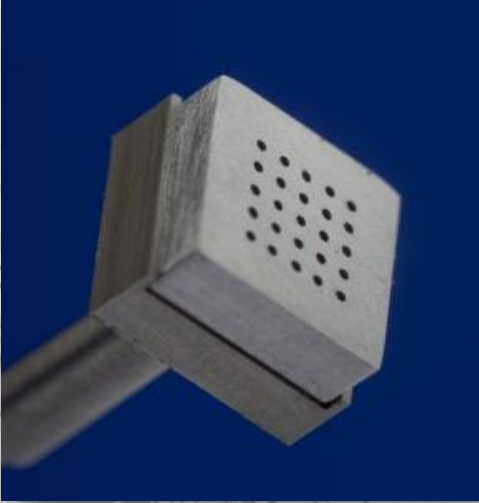
Excellent control on surface condition

Added Value Solution by MPP	
<b>Material</b>	Better wear and/or build-up resistivity
<b>Geometry</b>	Special tip design to reduce build-up
<b>Surface Treatment</b>	Optional types of <b>coatings</b> to <ol style="list-style-type: none"> <li>1. Resist Al "stick-up" → high bond count on 1<sup>st</sup> cycle, And/or</li> <li>2. Increase resistivity to wear</li> </ol>

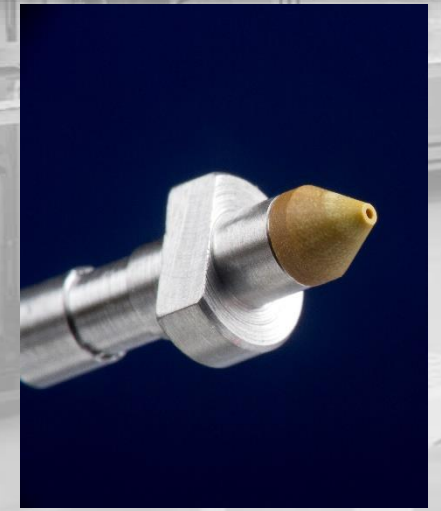
Our Commitment  
**Lowest Cost**  
**Per Bond**



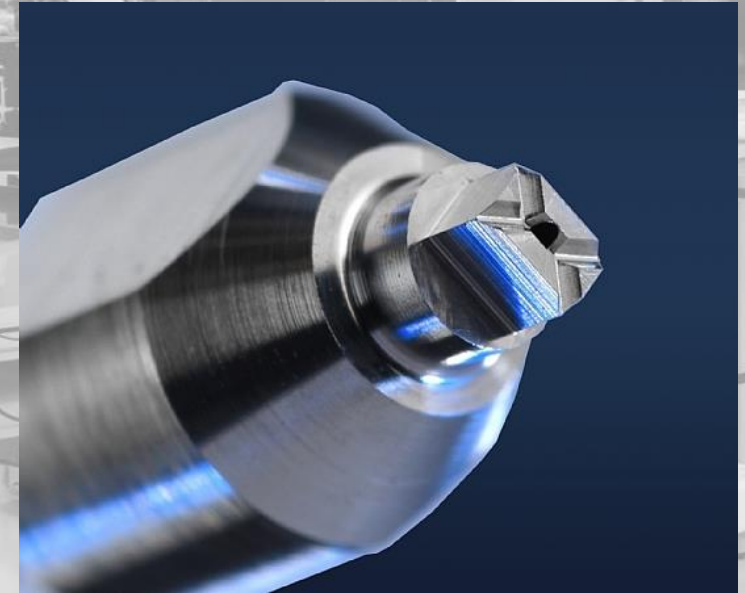
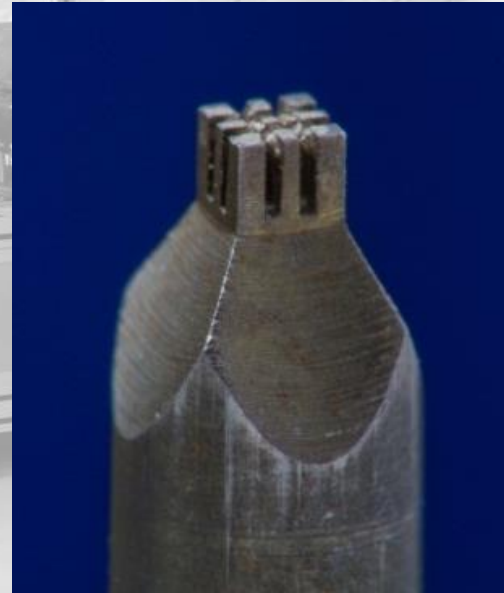
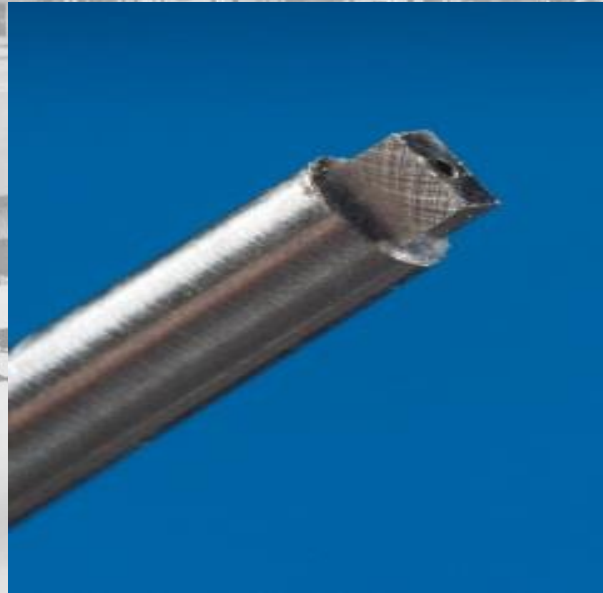
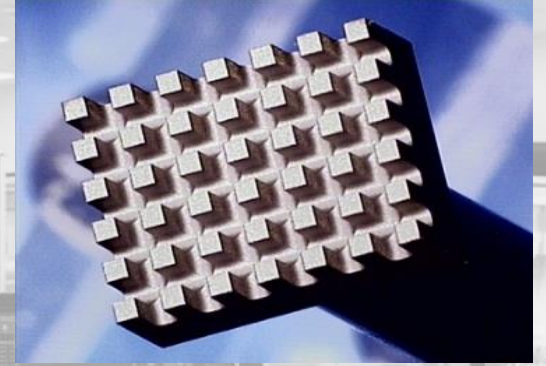
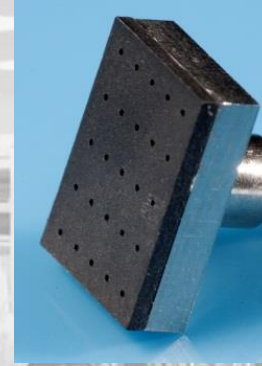
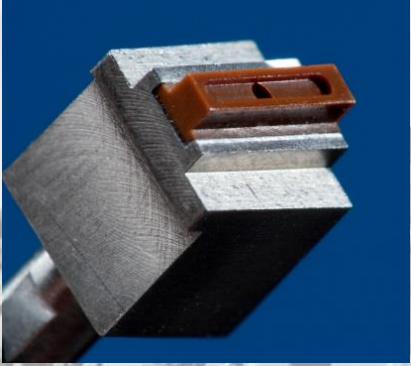
# Pick & Place and Dispensing Tools



- Customized designs
- A wide array of materials and combinations
- Special **surface treatment** and **coatings**
- Precise, Accurate, Tight Tolerances, High Repeatability



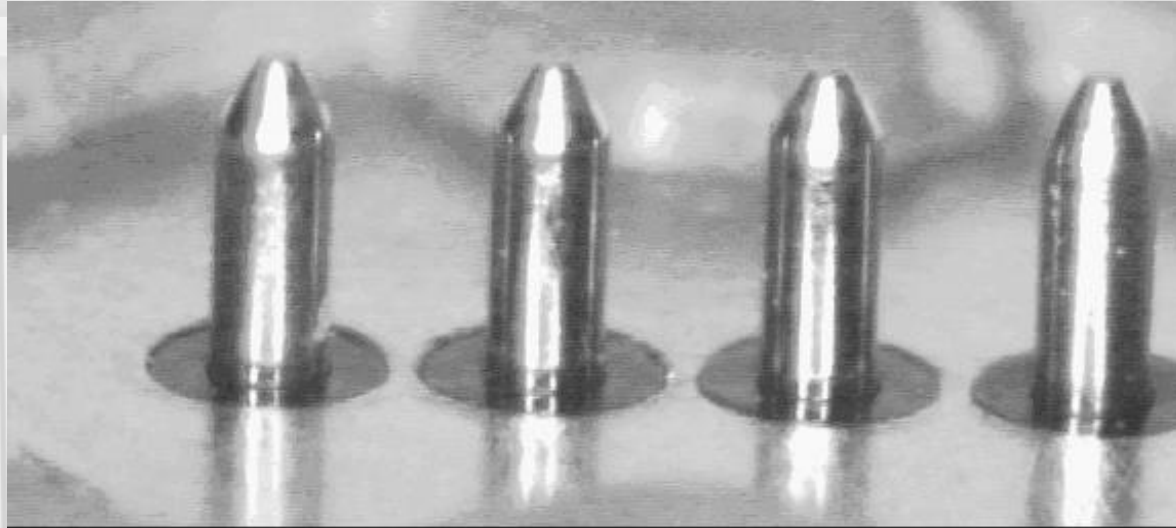
# Customized Tools



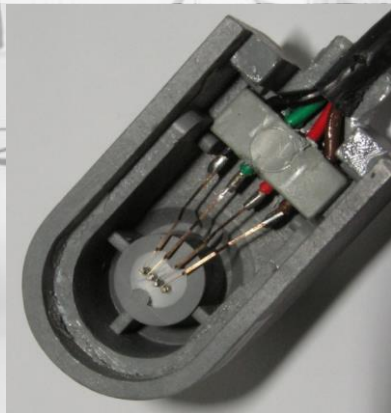


# Customized Probe Heads

- World leader in customized probe heads manufacturing
- Full production, assembly & test by MPP
- High accuracy & repeatability
- Strict QC/QA
- Short lead times
- Certified re-furbished probes
- Excellent engineering & product support

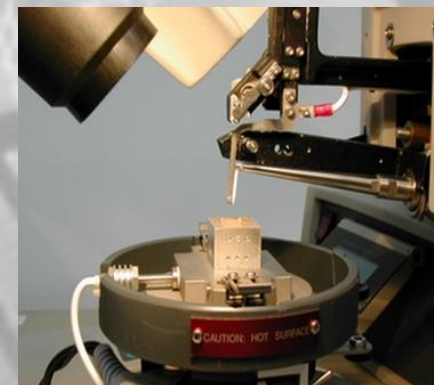


**Best cost  
performance  
solution.**



# Manual Wire bonders

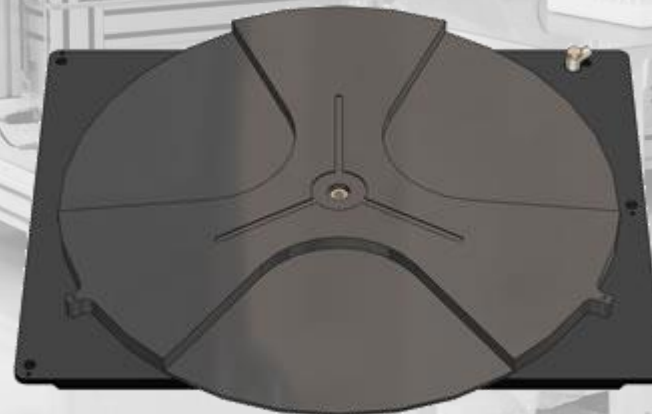
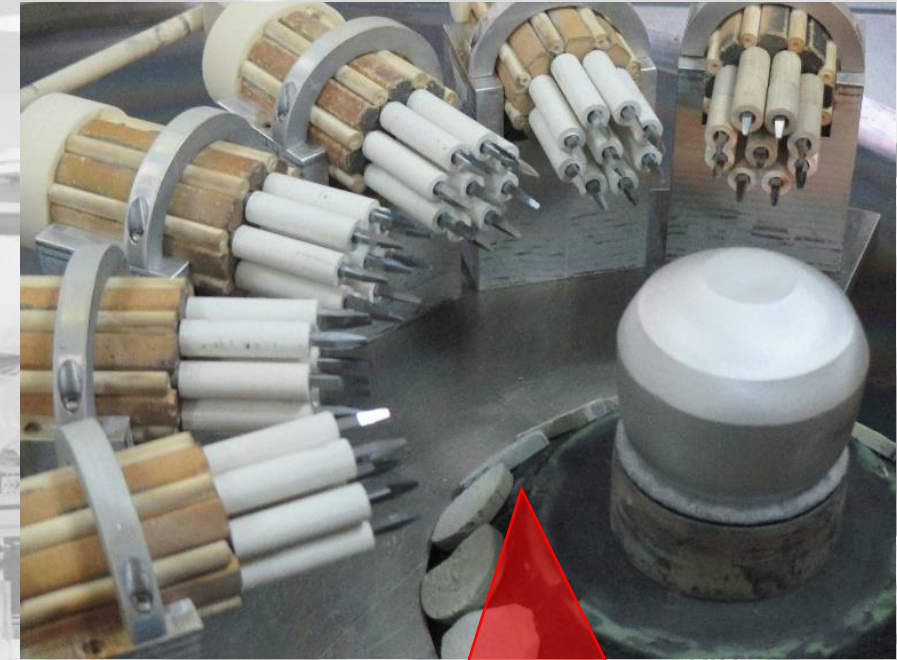
- Acquired from K&S in 2016
- Wedge, Ball & Dual head
- Best Value for money
- Excellent product & application support
- 24/7 online “help desk”
- Short delivery time
- Tailored purchase agreement
  - Trade-in option
  - Lease
- Tailored service agreement
- Used machines available





# Cold HV Thin-Film Coating

- Cold HV (Plasma) Thin-Film Coating at low temperature
- Used for various applications:
  - Wire bonding ← reduce AL build-up
  - Medical ← decrease stick-up of white blood cells
  - Optoelectronics applications ← anti reflective
  - Glass-like coating for Wafer Chucks
  - Increase abrasive resistance of precise mechanical parts



Cold HV-sputtering produces glasslike coatings thickness layer range is  $0.2 \div 3 \mu\text{m}$  ←  
Controlled thickness

# Precise (Micro) Parts

- Knowhow, expertise, experience, & cutting-edge precision technologies →
  - high precision solutions
  - Various array of applications
  - various material options

**Build to Spec  
&  
Build to Print**





# Other Applications



# MPP's Overall Solution

## Product leadership

- ✓ Cutting edge technologies:
  - ✓ EDM, Turning, Milling, grinding, Dicing
  - ✓ Self designed & build
- ✓ Continuous development of added value solutions
- ✓ Strict QC & QA approach ← Superior quality & repeatability

## Customer Centric

- ✓ Close & intimate engineering support
- ✓ Best cost performance
- ✓ Local logistic & technical support
- ✓ Global services
- ✓ commitment
- ✓ Customized solutions

## Operational excellence

- ✓ Mastering the whole production process: From Raw Material → End Product ← in ISRAEL
- ✓ Short Delivery time ← on time
- ✓ Tailored solutions ← consignment etc



# MPP's added value for VIP customers

Top Priority

Supporting  
Customer's  
Roadmap

Global  
Competitive  
Prices

Sub-contracting  
projects  
→ MPP to Invest

VIP "Lane"

Turn-Key  
Solutions

Dedicated  
Resources

A modern, multi-story office building with a glass and concrete facade. The building features a prominent dark grey section at the top with the 'MPP GROUP' logo in white. The building is surrounded by greenery and a paved area in the foreground.

MPP GROUP

# Appendix