# Optimize your Extrusion Press Alignment with Modern Technology



- Better press alignment and monitoring techniques increase the productivity, efficiency and quality of extrusion.
- Single day measurement of the complete press gives you the total 3D inspection model for compliance.
- Compare any component against specified 3D geometry.
- Measure and monitor under operational conditions without dismantling the press.
- Traditional methods are unable to identify or correct many press alignment problems
- Full press alignment measurement is faster, more accurate and reliable.
- Modern technology replaces or complements traditional methods and tools for Extrusion Press Alignment.
- Have your press Aligned or benchmarked
  - any type and make of extruder.

**ADS** provides Extrusion Press Alignment, Inspection, Monitoring and Adjustment that are now more efficiently achieved using modern 3D Coordinate Measurement Systems technology.

All the points and components required for the complete press inspection can be measured in one session and analyzed in three-dimensions as required in any combination (without dismantling the press and under operational conditions!).

Combined 3D measurement in one day of static and moving press components to provide:

- bedplate levelness and flatness
- back platen, main cylinder housing, ram piston, and main cylinder concentricity, and attitude
- front platen and pressure ring concentricity and attitude
- guide ways straightness, parallelism and symmetry to press centre line
- ram piston, crosshead and extrusion stem concentricity, straightness and attitude

- tie rods (columns) parallelism, symmetry and dimensioning
- dimensional relationship of all components to press centre line definition
- moving component paths ram, crosshead, stem, container and front platen

Subsequent optimisation analysis and corrective adjustment solutions can enable normal press production to continue despite wear or distortion and without major

Support for initial build and operational establishment, service adjustment or rebuild solutions.

### **ADS** – Advanced Dimensional Solutions

Get the competitive edge by using specialist industrial measurement services with experience in press alignment and the extrusion industry.

At ADS we use leading edge technology for industrial measurement services and for extrusion presses the Tracking Laser Interferometer is used. For more details

visit our Web-site: www.a-solution.com.au/ads.

## Extrusion Press Alignment with Modern Technology

a paper by Joseph Mulder & Gavin Smith from Advanced Dimensional Solutions

Read the complete paper from the Proceedings of the Seventh International Aluminum Extrusion Technology Seminar, published by the Aluminum Extruders Council and The Aluminum Association. ET2000 Chicago, IL 16-19 May 2000.

See also the "Press Alignment" chapter in the 3rd edition (2000) of the Extrusion Press Maintenance Manual. Kennedy, (Al) J.A., Fellom Publishing/Light Metal Age, San Francisco, CA, 2000.

When you wish to have download-access to the Presentation made at ET2000 and the paper "Extrusion Press Alignment with Modern Technology" then email us at ads@a-solution.com.au

### Who is this brochure for?

Production & maintenance engineering Press Designers, Manufacturers, Builders, & Re-builders Suppliers/vendors of press equipment

### Alignment frequency?

The three optimum maintenance management practices identified for extrusion presses are:

### **Establishment maintenance**

Setting up the initial state (build and operational) well within compliance specifications (essential) - call ADS.

### Preventive maintenance

Condition monitoring, regular Inspection, Alignment checks, and Overhauling at specified frequencies (full alignment checks every 1 to 2 years - call ADS).

**Predictive maintenance** 

Predicting servicing or overhaul requirements based on the detection of malfunction symptoms- regular inspection and condition monitoring.

Depending on the maintenance methods used - condition monitoring, monthly inspections, and annual alignment checks - can result in servicing, adjustment, refurbishment or eventual machine malfunction or failure causing non scheduled outage. Regular Press Alignments ensure optimum operation and production.

**FAQ's**: Frequently asked questions? See our web site download page www.a-solution.com.au/ads.

**More info?** Submit your press details/problem or request a proposal through our website. Go to 'Industries, Extrusion".

# **Advanced Dimensional Solutions Pty Ltd**

**Industrial Measurement specialists providing precision** measurement and analysis services to industry.

**Albury** +61 2 6041 2865 Fax +61 2 6041 2986 609 Olive Street, Albury, NSW 2640,

Sydney Melbourne Australia

+61 2 9144 5100 +61 3 9380 1666



Web www.a-solution.com.au\ads Email ads@a-solution.com.au