Choosing the Right Fixture For Your Application
Different parts need different fixtures

One Size Does Not Fit All

Geometric dimensioning and tolerances, welding processes and product volume influence fixturing requirements
Different approaches to producing a similar welded assembly
CIC Fixture
• Loose dimensional requirements
• Minimal locating
• Operator responsible for insuring parts are justified in the fixture
Choosing the Right Fixture For Your Application – Spec Grade Tooling
MANUAL WELD INDUSTRIAL FIXTURE
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• Manual clamping
• Shimmable location points
• Spatter resistant coatings on locating features susceptible to weld spatter
• Operator responsible for insuring parts are justified in the fixture
Choosing the Right Fixture For Your Application – Spec Grade Tooling
• Manual clamping
• Shimmable location points
• Spatter resistant coatings on locating features susceptible to weld spatter
• Movable locating features for ease of loading and unloading
Choosing the Right Fixture For Your Application – Spec Grade Tooling
ROBOTIC WELD / AUTO CLAMP
SPEC GRADE FIXTURE
• Focus on purchased parts
• Slide stops included in both directions
• Cylinders retracted when possible
• Plumbing and wiring protected
• Minimized operator responsibility
• Rough locators to aid loading
ROBOTIC WELD / AUTO CLAMP
SPEC GRADE FIXTURE

- Sequencing flexibility
- Locators retractable for ease of unload
- Part and open/closed sensors
- Includes error proofing
- Helps avoid post machining costs
- Parts are located using GD&T features
- Designed for high volume production
Choosing the Right Fixture
For Your Application –
Spec Grade Tooling
Fully Automated Spec Fixture
Fully Automated Spec Fixture
Fully Automated Spec Fixture

- Redeployment of robots possible
- Reduces operator variability
- Requires less skilled labor to operate
- High volume production
- Parts loaded into magazines
- Maximizes uptime
- Cost control