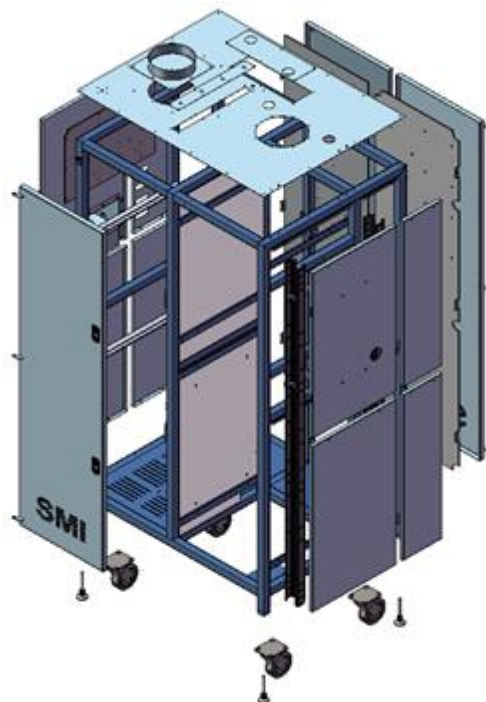




Custom Frame Design and Manufacturing Capabilities

Structured Material Industries, Inc. provides a complete line of affordable, dependable, and scalable frame design and manufacturing capabilities for the research and development community. Dedicated to providing tailored solutions, SMI offers these custom frames in two standard formats: All Welded Steel™ and Aluminum 80/20 T-slot™. Our frames are designed to have the option of enclosed solid or windowed panels and doors. The frames also feature exhaust ducts for optimal safety design. Frames can be supplied with premounted interlock hardware or other custom features. Cart mounted frames are also available. Enclosed frames are ideal for MOCVD, CVD, HVPE, ALD and other similar processes.



SMI uses SolidWorks™ to design custom frames. The image above shows an exploded view of a "All Welded Steel" frame; which features basic frame, bulkheads, exhaust ducting, cooling fans, heavy rack mounting, shelves, panels, casters, and leveling feet. SMI works directly with its customers to design efficient reliable frames based precisely off of their needs.

Frame Types:

- ❖ All Welded Steel™ Frame
- ❖ Aluminum 80/20 T-slot™ Frame

Frame Features:

- ❖ Professionally Designed
- ❖ Easily Customizable
- ❖ Durable
- ❖ Maximizes functional capacity
- ❖ Configurations for safety, scaling, and performance enhancement
- ❖ Cleanroom compatible
- ❖ Optional sensors for panels or doors
- ❖ Optional load unload assembly
- ❖ Optional glove box assembly

Frame Specifications:

- ❖ Colors: Two tone standard; but may be customized.
- ❖ Strut Size: sized to the project
- ❖ Dimensions: Desktop to several meters
- ❖ Private labeling also available

Applications for Standard and Custom Use:

- ❖ Holds reactor assemblies
- ❖ Supports vapor delivery and gas handling
- ❖ Anchors exhaust pump assemblies
- ❖ Externally protects components
- ❖ Mainstay for process control system and electronics
- ❖ Abatement Housing



Custom Frame Design and Manufacturing Capabilities

All Welded Steel™ Frames

Product Specifications:

- ❖ Panel Options: Solid, windowed, or hinged doors
- ❖ Bulkheads/utility bulkheads (air, gas, exhaust, power)
- ❖ Integrated EMO and power load centers
- ❖ Optionally integrated electronic rack mounts
- ❖ Internal welded unistrut™ mounting, and shelving
- ❖ Pre-drilled and tapped mounting bolt holes
- ❖ Paint-baked on powder coat
- ❖ Access panels
- ❖ Power distribution load centers



All Welded Steel™ Frame: The ultra-rugged all welded personally crafted frame. Ideal for permanent or rugged use environments, SMI offers custom designed welded steel frames for maximum safety and resilience. This model features include the integration of bulkheaded electronics bays, bulkhead separation of gas handling, power centers, electronic rack mounting and process operation zones.

Aluminum 80/20 T-slot™ Frames

Product Specifications:

- ❖ Panel Options: Solid or windowed panels/slides or hinged doors
- ❖ Bulkheads/utility bulkheads (air, gas, exhaust, power)
- ❖ Integrated EMO and power load centers
- ❖ Optionally integrated electronic rack mounts
- ❖ Internal mounting bars and shelving
- ❖ Pre-drilled and tapped mounting bolt holes



Aluminum 80/20 T-slot™ Frame: The economical choice This frame is configured with extruded Aluminum strut with bolted together mechanical unions that minimize cost, eases assembly and allows added flexibility for easy future modifications.