



## **jFLEX SFMC:**

# The Ultimate CNC Machining Center for Window Profile Fabrication

The jFlex SFMC is the most advanced multi-track, multi-step processor for PVC, aluminum, and fiberglass extrusions. With its highly flexible design, the jFlex can run multiple window profiles and systems, and can be quickly retooled for entirely different products with minimal changeover. Thanks to the all-CNC fabrication, setup time is drastically reduced, allowing seamless transitions between product lines.

The machine's advanced zone fabrication technology enables pre-positioning of tools and parallel processing along the length of the part. This innovation delivers cycle times comparable to dedicated tooling, while maintaining the flexibility of CNC fabrication—ideal for adapting to future parts and production needs.

Featuring multiple CNC servo axis assemblies, the jFlex allows independent operation of multiple tracks simultaneously. Paired with a dual-push infeed and multi-track fixture, the system is optimized for high-volume production of like-size units, significantly improving throughput and labor efficiency.

Customized to your specific production requirements, the jFlex SFMC not only increases throughput but also enhances part quality, making it the perfect solution for fabricating light aluminum alloys, PVC, and fiberglass extrusions.

### **BASE MACHINE**

- → 2 or 4 track fixtures, guides
- → 16' to 24' CNC in-feed provides precise accuracy for fabrication placement and OA part length
- → Automatic stock length detection
- → Easy systems start by control buttons at in-feed load station
- → Opposing 45° saw assemblies
- → Servo and ball-screw horizontal blade feed
- → Precision rails and linear bearings
- → Direct drive variable frequency miter saw motors, spin saw blade up to 3450 RPM
- → PC HMI with .NET and familar Windows Operating System
- → Network ready and batch production capable
- → Machine sequencing and CNC control through industrial programmable logic controller
- → 18" x 5' exit-side table with stainless steel top
- → Pneumatic clamping system
- → Welded Tubular steel inner frame
- → Aluminum sealed outer safety housing
- → Powder coated finish
- → Air filter/regulator with OSHA compliant lockout/tagout
- → Metal enclosed bottom with vacuum port or pull out trays debris management
- → Out feed scrap chute

## MACHINE OPTIONS

- → Dust collection system
- → Custom color finishes
- → Safety package upgrades
- → Auto-lubrication system for bearing and ball-screw lubrication
  - Pro-Lube lubrication system for extended
- → blade life

#### Fixtures:

- → 2 or multi track custom fixtures
- → Machined anodized aluminum fixtures
- → Alternative fixture material and coatings available
- → Vertical/Horizontal clamping custom
- →designed to profile design
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#### Saw Assemblies:

- → Servo controlled positioning along 45° axis for saws via ball screw
- → 18", 20", 22" diameter carbide tipped saw blade
- → 5 HP saw motors



#### **Fabrication Modules:**

- → Electric drills/router with variable frequency drives
- → Full CNC servo control in all axis
- → Gear rack and ball screw precision motion

#### **Control Systems:**

- → Upgrade to Allen Bradley Control System
- → Transformers available for different voltages

#### Software:

- → Lineal optimization
- → Preventative maintenance software
- → Tail end utilization
- → Label printing

#### In-feed:

- → Dual axis in-feed for height and width simultaneous processing
- → Custom in-feed lengths accommodate 20' or 24' lineal
- → Optional pre-load systems
- → Independent mill length detection available
- → Quick change in-feed gripper and UHMW guides
- → Linear encoder
- → Optional gear rack system for higher precision

#### Out-feed:

- → 10' roller table standard
- → Power conveyors
- → Optional part wiper tables & extractor systems
- → Optional laser marking stations

# TECHNICAL SPECIFICATIONS

- → Power: 480 V
- → Air: 80 -100 PSI Warranty: One year
- → Parts and Service (excluding travel)