USA TUNGSTEN

Tungsten Bucking Bars

A supply and recovery program for aircraft assembly

STOCK ON DEMAND **RECOVER WHAT WEARS OUT**

Dense, durable bucking bars delivered as you build, with a recovery loop that keeps tungsten in the supply chain.

AS9100D **ISO 9001** **ITAR / DDTC** **DFARS** **HUBZONE**

THE MATERIAL

Why tungsten wins behind the rivet

A bucking bar gives a rivet something solid to form against. The gun drives the rivet from the front; the bar holds reactive mass against the tail so the shop head upsets cleanly and to specification. The more mass you place directly behind the joint, the better the head and the less the bar fights the operator. Tungsten heavy alloy carries roughly twice the mass of steel in the same volume, and that one property changes what a bucking bar can do.

Material	Density (g/cm³)	Mass per unit volume
Tungsten heavy alloy (WHA)	17.0 - 18.5	Reference
Lead	11.3	~0.62x
Steel	7.85	~0.44x
Aluminum	2.70	~0.15x

Standard material densities. WHA varies with tungsten content, nominally 90-97%.

What the density buys on the line

- **Reach into tight structure.** A tungsten bar puts full reactive mass into confined wing, fuselage, and nacelle joints where a steel bar of the same weight will not fit.
- **Cleaner shop heads.** High inertial mass holds the bar steady against the tail and absorbs gun rebound, producing consistent, in-specification heads across long runs.
- **Less operator fatigue.** A smaller, better-balanced bar is easier to hold in position overhead and in-station through a full shift.
- **Long service life.** Tungsten heavy alloy is hard and wear-resistant, so the working face holds up. When a bar finally wears or breaks, it returns through the recovery program.

Built to your bars

Bars are supplied in the shapes your work calls for: flat and rectangular, offset and dogleg, toe and heel, and contoured profiles. Each is matched to your drawings and listed on the part-number schedule.

PROGRAM ONE · SUPPLY

We stock your bars. You pull as you build.

USA Tungsten holds a finished-goods buffer of your bucking bar part numbers and keeps it filled to an agreed level. Your mechanics pull against it with standard releases. We ship fast and refill behind every pull, so the line is never waiting on a bar and you carry no inventory or material-price risk on the stock we hold.

01	**Stock**	We hold your part numbers in finished stock, sized to your forecast.
02	**Pull**	You release bars as the line consumes them. Title passes on shipment.
03	**Ship**	We ship under AS9100D quality control within committed windows.
04	**Replenish**	We refill behind each pull to hold the buffer at its set points.

What we run

- A finished-goods buffer sized to your forecast, held ready to ship.
- Shipment under AS9100D quality control within committed windows.
- A committed fill-rate target against the agreed set points.
- First-article approval on each geometry, with full quality flow-down.

What we need from you

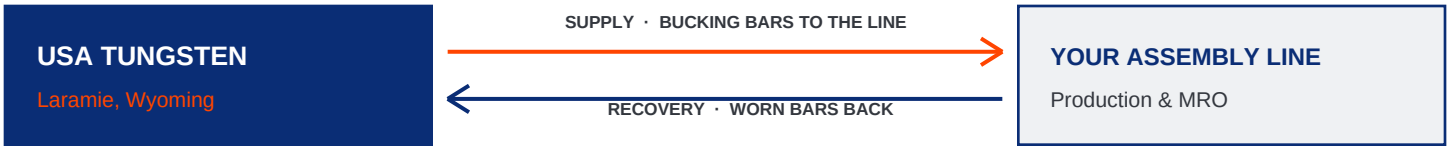
- **Part-number schedule:** bar types, sizes, weights, and drawings.
- **Rolling 12-month forecast:** by part number, first 90 days firm.
- **Sole-source designation:** on the listed part numbers for the term.

The forecast sizes the buffer and our sequencing. It is what lets us hold depth on your sizes and ship to committed windows.

PROGRAM TWO · RECOVERY

Worn bars come back. Tungsten stays in the loop.

Tungsten is a critical material, and a worn or broken bar still holds nearly all of it. You ship spent bars to us, we verify and document the returned tungsten, and you receive a recovery credit toward future bucking bar orders. The material is consolidated and routed into recovery, kept in the domestic supply chain instead of going to landfill or a scrap broker.



How the loop runs

- **Return.** Collect worn and broken bars and ship them to our Laramie facility in consolidated lots.
- **Verify.** We weigh and verify the returned tungsten and issue documentation for your records.
- **Credit.** You receive a recovery credit toward future bucking bar purchases, by returned weight.
- **Recover.** The tungsten is consolidated and routed into recovery, kept onshore.

What you get back

- A traceable, responsible disposal path for spent tungsten tooling.
- Value returned: a recovery credit against your next orders.
- A measurable contribution to domestic tungsten circularity for your reporting.

Credit rate, return-lot minimums, and inbound freight are set in the program term sheet.

THE PARTNERSHIP

One supplier. Two loops.

The two programs run as a single relationship. We keep your line supplied with the bars it needs, and we take the worn ones back into the tungsten supply chain. You get reliability on the floor, value on the return, and a supplier invested in keeping tungsten onshore.

Why USA Tungsten

A United States-owned and operated supplier to defense and aerospace programs, USA Tungsten runs a controlled, quality-managed operation out of Laramie, Wyoming. The program puts that discipline behind a routine consumable, so your mechanics are never waiting on a bucking bar and your spent tungsten never goes to waste.

AS9100D
Aerospace quality management system

ISO 9001
Certified quality management

ITAR / DDTC
Registered, M42989

DFARS
Compliant supplier

HUBZone
Certified small business

CAGE / UEI
842W5 · B3GYH6M8JLR4

Next step

Send your bucking bar part-number list with sizes and annual volumes, plus a first-pass 12-month forecast. We return a term sheet covering both the supply and recovery programs.

Request a quote: usatungsten.com/request-a-quote/

USA Tungsten · Laramie, Wyoming · CAGE 842W5 · UEI B3GYH6M8JLR4