Operators Check List

Problem	Probable Cause
Slivers or flakes on threads	1. Rolls not in match, or 2. Center line of rolls not parallel with center line of work, or 3. Cross slide or adapter pivot pin worn, or 4. Overfilling rolls, or 5. Material not adaptable to cold-working, or 6. Rough finish on blank, or 7. Seamy stock
Drunken threads	1. Rolls not in match, or 2. Center line of rolls not parallel with center line of work, or 3. Inacurate rolls, or 4. Work bending during rolling.
Offsize threads 1. Pitch diameter and major diameter, both oversize 2. Pitch diameter oversize, major diameter correct size 3. Pitch daimeter oversize, major diameter undersize 4. Pitch diameter correct size, major diameter oversize 5. Pitch diameter correct size, major diameter undersize 6. Pitch diameter undersize, major diameter oversize 7. Pitch diameter undersize, major diameter correct size 8. Pitch diameter and major diameter both undersize	Oversize blanks Oversize blanks. If finished thread is full, thread on roll is too shallow Insufficient squeeze on rolls. If finished thread is full, thread on roll is too shallow Blank too large. Thread on roll deeper than necessary Blank too small. If finished thread is full, thread on roll is too shallow Too much squeeze. Thread on roll deeper than necessary Blank too small. Thread on roll deeper than necessary Blank too small
Out of round threads	1. Out of round blank, or 2. Center line of rolls not parallel with center line of work, or 3. Feed rate too high, or 4. Insufficient work revolutions, or 5. Material not ductile enough for cold-working, or 6. Not rolling to center line of work
Tapered threads 1. Pitch diameter straight, major diameter tapered and not filled out on small end 2. Pitch diameter and major diameter both tapered same way 3. Pitch diameter and major diameter tapered in opposite directions and thread not filled out on end with small major diameter	Tapered blank Tapered blank and rolls set up with taper to match Rolls not squeezed tight enough on edge with large pitch diameter and small major diameter, or work bending during rolling
Thread with expanded lead	Expanded lead in rolls

Problem	Probable Cause
Thread with contracted lead	Contracted lead in rolls
Poor thread form	1. Poor thread form in rolls, or 2. Work bending during rolling, or 3. Rolls not in match, or 4. Too many work revolutions, or 5. Excessive or restricted end travel of rolls, or 6. Center line of rolls not parallel with center line of work
Thread filled out in center, but not towards ends, or vice versa	1. Roll with varying diameter from end to end, or 2. Blank with varying diameter from end to end
Split thread—axially	1. Seamy stock, or 2. Mark from shave tool or hollow mill
Poor finish on thread	1. Correspondingly poor finish on rolls, or 2. Rolls that are worn out or broken ,or 3. Overfilling rolls, or 4. Rolls not in match, or 5. Material accumulated in threads on roll, or 6. Material not ductile enough for cold-working
Crests not filled out. Many users do not consider this a serious objection and by allowing their threads to pass with crests not filled out, overloading of rolls is avoided and roll life is prolonged	1. Blank too small, or 2. Thread on roll too deep
Scuffed crests	1. Attachment not retracting fast enough, or 2. Rolls and gear train binding, or 3. Rolling beyond center line of work, or 4. Material accumulated in threads on rolls
Hollow work, hole closes in	1. Machine hole after rolling, or 2. Needs supporting mandrel, or 3. Feed rate too high, causing too rapid penetration
Hollow work, hole enlarged	1. Machine hole after rolling, or 2. Supporting mandrel too tight, or 3. Blank too large on major diameter, or 4. Feed rate too high causing too rapid penetration
Hollow work, out of round	1. Machine hole after rolling, or 2. Feed rate too high causing too rapid penetration, or 3. Too few work revolutions
Hollow work, tapered threads due to uneven wall thickness or support from adjacent section	1. Machine hole after rolling, or 2. Improper mandrel not giving support where needed, or 3. Feed rate too high causing too rapid penetration, or 4. Taper of rolls not great enough to compensate for tendency of work to taper, or 5. Too thin wall thickness