



---

## **C A S E   S T U D Y**

**INDUSTRY:**                      **TILE MANUFACTURING**

**PROCESS:**                      **BODY PREPARATION**

**APPLICATION:**              **HYDRAULIC PRESS**

**LUBRICATION:**              **HYSPIN AWS 46 HYDRAULIC OIL**

### **EVALUATION BEFORE CASTROL:**

1. **Lubricant used** –Company “M” ATF oil  
Total oil capacity 1,990 gallons @ body prep  
Total amount of oil used one year prior to Castrol with changeover every 6 month  
 $1990 \text{ gal} \times 2 \text{ changeover per year} = 3,980 \text{ gal per one year}$   
 $3,980 \text{ gal} \times \$4.97 \text{ per gal} = \$19,781 \text{ oil cost per one year}$
2. **Make-up Oil** (10% of total volume)  
 $398 \text{ gal.} \times \$4.97 \text{ per gal.} = \$1,978 \text{ per year}$
3. **Oil Analysis**  
Four (4) samples taken every year per unit.  
 $8 \text{ hyd units} \times 4 \times \$55 \text{ each} = \$1,760 \text{ per year}$
4. **Waste Oil Disposal**  
 $3,980 \text{ gal} \times 40 \text{ cents per gal} = \$1,592 \text{ per year}$
5. **Oil change labor**  
 $2 \text{ times per year} \times 4 \text{ man-hours per change} \times 8 \text{ units} = 64 \text{ hours}$   
 $64 \text{ hours} \times \$30 \text{ per hr} = \$1,920 \text{ per year}$

## EVALUATION AFTER CASTROL:

1. **Lubricant used** – Hyspin AWS 46  
Total oil capacity 1,990 gallons @ body prep  
Total amount of oil used in one year after Castrol with changeover every year.  
1990 gal x 1 changeover per year = 1990 gal per year  
1990 gal x \$6.81 per gal = \$13,552 oil cost per year
2. **Make-up Oil** (10% of total volume)  
199 gal. x \$6.81 per gal. = \$1,355 per year
3. **Oil Analysis**  
*No charge for oil analysis.*
4. **Waste Oil Disposal**  
1,990 gal x 40 cents per gal = \$796 per year
5. **Oil change labor**  
1 time per year x 4 man-hours per change x 8 units = 32 hours  
32 hours x \$30 per hr = \$960 per year

### **1 YEAR SAVINGS EVALUATION**

	Product Used	Before CASTROL	Castrol Hyspin AWS
1	Total Volume Used	3,980 gal.	1990 gal.
2	Total Product Cost	\$19,781	\$13,552
3	Changing Frequency	6 month	12 month +
4	Make-Up Cost	\$1,978	\$1,355
5	Oil Analysis Cost	\$1,760 not included	0
6	Oil Waste Cost	\$1,592	\$796
7	Oil Change Labor	\$1,920	\$960
	Total Maintenance Cost	\$25,271	\$16,663
	TOTAL SAVINGS	-	<b>\$8,608</b>

## SAVINGS:

- **Total savings per 1 year - \$8,608**  
(oil analysis cost is not included)

Study prepared by:  
Yefim Lev,  
Castrol Senior Application Engineer

Study verified by: Maintenance Technicians  
(Tile manufacturing company)