



SCARBROUGH

**QUESTION/ANSWER FORUM:
DOMESTIC SHIPPING 101**





THE SCARBROUGH GROUP



SCARBROUGH
INTERNATIONAL, LTD.

Est. 1984 International Freight / U.S. Customs

Est. 1988 Own Trucking Fleet



SCARBROUGH
LOGISTICS, LTD.



SCARBROUGH
SIX LINES, LTD.

Est. 2003 NVOCC Operations

Est. 2014 NAFTA Truck Brokerage



SCARBROUGH
TRANSPORTATION, LLC



SCARBROUGH
DE MÉXICO S. DE R.L. DE C.V.

Est. 2015 Freight Forwarder / Mexico Customs



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AGENDA

- **Modes**
- **Quoting Requirements**
- **Classifying/Quoting Domestic Shipments**
 - LTL
 - Density LTL
 - Using CBM's
 - Truckload
- **Hours Of Service**





MODES OF TRANSPORT



Truckload

- 26 pallets
- 43,500 – 44,000 lbs
- Quote from market trends and available capacity, not always guaranteed



Volume

- 6 or more pallets
- More than 5,000 lbs
- Takes up 12 to 32 linear feet
- Quote is shipment specific, rate is usually good for a week



LTL

- 1 – 5 pallets,
- Less than 5,000 lbs
- Quote from negotiated rates, coverage confidence very high



WHAT IS REQUIRED FOR A QUOTE REQUEST

LTL

- Origin and destination zip codes
- Number of pieces
- Packaging (loose, palletized)
- Freight class, NMFC, or commodity description
- Total Weight
- Dimensions
(for ea. Individual unit)
- Loading and delivery requirements
(lift gate, limited access, residential)

FTL/Truckload

- Origin and destination zip codes
- Transit Time requirements
- Commodity
- Weight
- Loading and delivery requirements
(appts or FCFS, hours of operation)



Send new requests to dompricing@scarbrough-intl.com



CLASSIFYING FREIGHT

LTL (Less than truck Load)

- There are 18 NMFC Classes (from 50 to 500)
- Normally the lower the Freight Class, the lower the cost
- Freight classifications are based on:
 - Density
 - Value
 - Ease of handling (Forklift, pallet jack or hand loading)
 - Stow-ability (difficulty in loading and carrying these items)
 - Liability of theft and damage





CLASSIFYING FREIGHT

DENSITY BASED COMMMODITIES

- More dense items such as steel and machinery can have low classifications (50 through 85)
- Fragile or bulky items tend to fall into freight classes 125 to 500

The formula to determine the density is:

$$L \times W \times H / 1,728 = \text{Cubic Feet (CU FT)}$$
$$\text{Weight (Pounds)}/\text{CU FT} = \text{Density (\#PCF)}$$

*This should be figured for each handling unit in the shipment



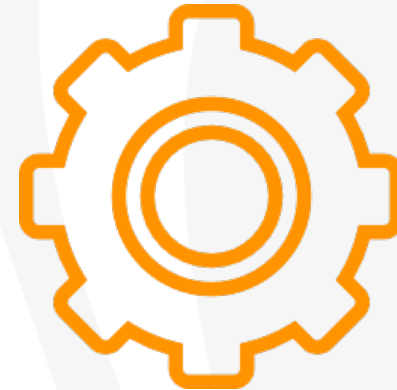
DENSITY BASED COMMODITIES

How do you classify density based commodities?

- Commodity: Plastic Sleds
1 pallet 48 x 40 x 30 & 474 LBS*
 $474 \text{ LBS} / 33.33 \text{ CF} = 14.22 \text{ PCF}$

1 Pallet 48 x 40 x 60 & 500 LBS*
 $500 \text{ LBS} / 66.7 \text{ CF} = 7.5 \text{ PCF}$

* Always include the weight of the pallet or crate.





CLASSIFYING DENSITY BASED COMMODITIES

- 14.22 LBS/CF = Class 85
- 7.5 LBS/CF = Class 125

156600	<p>Articles, viz.: Articles, NOI; Boot or Shoe Forms or Trees, other than display forms or trees; Caps, Covers, Discs, Ends, Bands, Rings or Tops, NOI, for bottles, cans, cups, collapsible tubes, glasses, jars or jugs; Car Seats, child or baby; Columns; or other Forms or Shapes, NOI; architectural; Containers, packaging, NOI; Cups or Tumblers, NOI; Filmstrip or Audio or Video Cassette Storage Albums; Garbage or Refuse Cans; Gloves, see Note, item 156604; Grips, NOI, including Golf Club, Hand Tool or Handlebar Grips; Liners, swimming pool, plastic film or sheeting; Molding, other than baseboard or cove; Motion Picture Film Cans, Cores, Magazines, Reels or Film Spools, empty; Pipe or Pipe Fittings; Poultry Watering Systems, see Note, item 156603; Seats, toilet or water closet, hollow molded; Tanks, NOI; Tractor Treads, rubber; Tubing, NOI, other than flexible; In boxes, crates, drums or Packages 870, 1078, 1241, 1273, 1456, 2195, 2212, 2213, 2230 or 2459, see Note, item 156602, subject to Items 170 and 171 and having a density in pounds per cubic foot of:</p>	
<i>Sub 1</i>	<i>Less than 1</i>	400
<i>Sub 2</i>	<i>1 but less than 2</i>	300
<i>Sub 3</i>	<i>2 but less than 4</i>	250
<i>Sub 4</i>	<i>4 but less than 6</i>	175
<i>Sub 5</i>	<i>6 but less than 8</i>	125
<i>Sub 6</i>	<i>8 but less than 10</i>	100
<i>Sub 7</i>	<i>10 but less than 12</i>	92.5
<i>Sub 8</i>	<i>12 but less than 15</i>	85
<i>Sub 9</i>	<i>15 but less than 22.5</i>	70
<i>Sub 10</i>	<i>22.5 but less than 30</i>	65
<i>Sub 11</i>	<i>30 or greater</i>	60



QUOTING FROM CBM'S

When only CBMs are known on a shipment, we have to estimate the number of pallets that the freight will require for transport.

We can use this conversion tool to estimate the pallet count.

If the freight is palletized differently the rate could change significantly.

Shipment example:

41 pieces	}	6.9 cbm = 244 cubic feet	}	3 pallets, total weight 2,196 lbs
2,196 lbs		244/93 = 2.623655 pallets		
6.908 cbm				



QUOTING FROM CBMs

When quoting from CBMs, it is important to remember that your calculation is just an **estimate** based off standard pallets. It is best to know the actual dimensions, so an accurate quote can be given.

For example:

- If the 41 cases do not fit on three skids, then the pallet count would increase. Our estimate was based on stacking them 84" high.
- If due to packaging they can only be stacked 40" high the pallet count can increase from 3 to 6.
- At 6 pallets a volume quote should be obtained. Rates could significantly increase.
- Volume quotes are spot quotes that are usually good for 3-7 days that normally move on availability.



WHEN TO USE FTL OR TRUCKLOAD SERVICE

When to use truckload service:

- Your shipment fills the trailer
- Truck load service can occasionally be more cost effective than volume service.
- Your volume shipment has a deadline.
 - Truck load service will usually have a faster transit time than volume LTL.
- Your product is fragile and has a high potential for damage.
 - Truckload freight is normally only handled twice. (loading and unloading)



THINGS TO CONSIDER

FTL/Truckload

- Rates are often transactional.
- Available capacity and the demand for that capacity in the given market, are factors that affect these rates.
- Load requirements will affect the rates.
 - Haz-Mat and/or Tanker endorsements
 - Team Drivers
- When we quote TL capacity is not usually guaranteed. We often quote and then source a truck, once we have been tendered the load. We may be able to quote “truck in hand” if/when needed.



EQUIPMENT GUIDE

TRAILER EQUIPMENT GUIDE

	53' Reefer	53' High Cube Van
Overall Length	53'	53'
Inside Length	51'6"	52.4'
Overall Height	13'6"	13'6"
Inside Height	103.5"	110"
Door Opening	101.8" H 98.3" W	110" H 98.3" W
Overall Width	102"	102"
Inside Width	97" at scuff	98.7" at scuff
Dock Height	52.2"	50"
Loading Capacity	43,500 lbs	44,000 lbs
Pallets	26 straight in	26 straight in



ELECTRONIC LOGGING DEVICE (ELD) MANDATES

What are ELDs and why are they being used?

- The ELD mandate requires that truck drivers use electronic logging devices (ELDs) to monitor driving hours.
- The ELDs are to verify that drivers are adhering to the current hours-of-service (HOS) regulation.
- ELDs are connected to the truck's computer / diagnostic system and know when the truck is actually moving or sitting still.
- With the logging device attached to the truck, it ensures that an accurate record is kept.





ELECTRONIC LOGGING DEVICE (ELD) MANDATE

What will be the impact of ELDs and what can be done?



Drivers

- Once a driver's day is started, he/she cannot stop the clock
- Time spent waiting for or sitting in a dock is time taken away from driving
- Preplanning and time management becomes more important
- The term "driver friendly freight" may start to be heard

Customers

- The transit time needed to transport goods is now under tighter control
- How much time drivers are spending on average at your facility?
- Can anything be done to shorten this time so drivers can get back out onto the road?



HOURS OF SERVICE REQUIREMENTS (HOS)

11-Hour Driving Limit

- May drive a maximum of 11 hours after 10 consecutive hours off duty.

14-Hour Driving Limit

- May not drive beyond the 14th consecutive hour after coming on duty, following 10 consecutive hours off duty. Off-duty time does not extend the 14-hour period.

Rest Breaks

- May drive only if 8 hours or less have passed since end of driver's last off-duty or sleeper berth period of at least 30 minutes.
- Basically drivers must take a 30 break before they can drive past their 8 hour of consecutive driving.

10 hour break

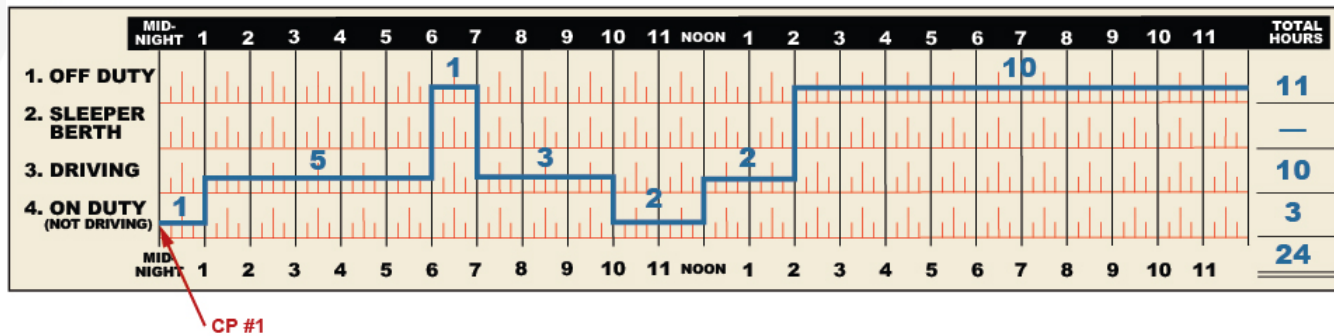
- Each 10 hour break must contain at least 8 hours in the sleeper berth, plus 2 separate consecutive hours either in the sleeper berth, off duty or any combination of the two.



14-HOUR “DRIVING WINDOW”

Driver’s Available 14-Hour Period

Day 1



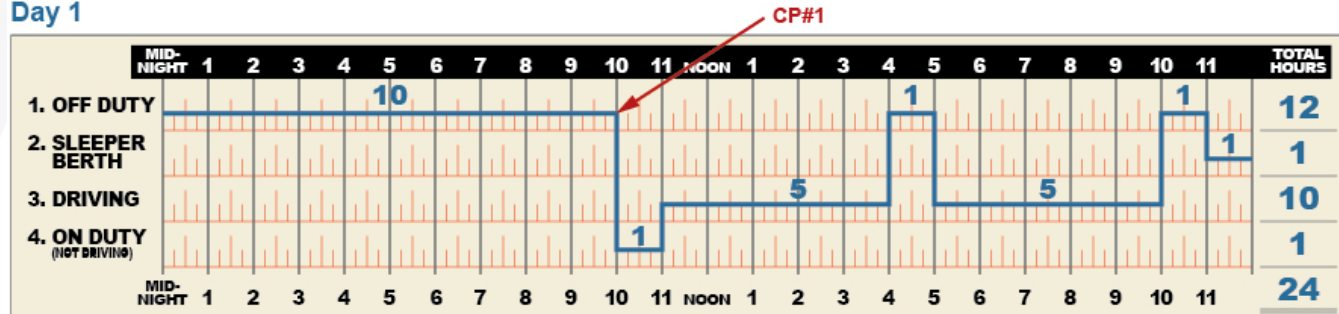
- **Violations:** There are no violations.
- **Explanation:** This is an example of the 14 consecutive-hour “driving window.” After 10 consecutive hours off duty on the prior day, the driver had 14 hours available and started his/her “driving window” at Midnight on Day 1 (CP#1). At 2:00 p.m., the driver had reached the end of the 14-hour “driving window” (10 hours driving; 3 hours on duty; 1 hour off duty). The driver may not drive a commercial motor vehicle (CMV) once he or she has reached the end of the 14 consecutive-hour period (unless a 16-hour day is available [Section 395.1(o)]), and in this example the driver goes off duty for the required 10 consecutive hours starting at 2:00 p.m. on Day 1.



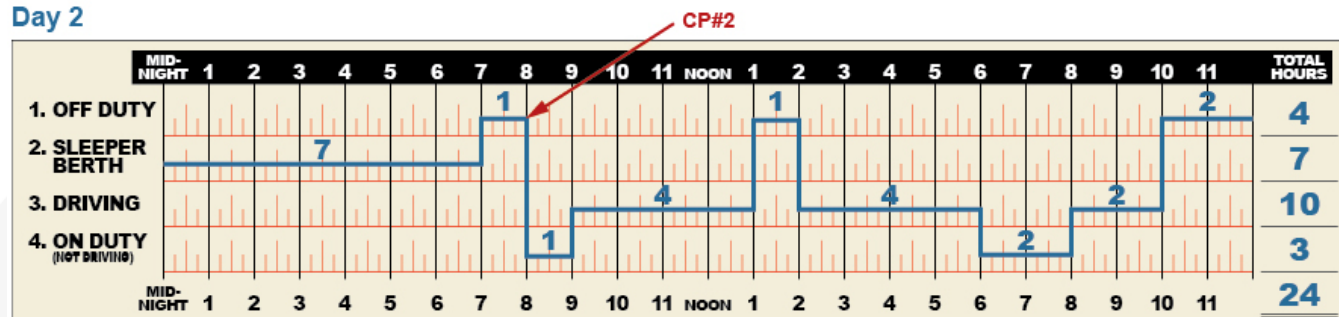
10 CONSECUTIVE HOUR OFF-DUTY BREAK

Use of Sleeper-Berth Time in 10 Consecutive Hour Break

Day 1



Day 2



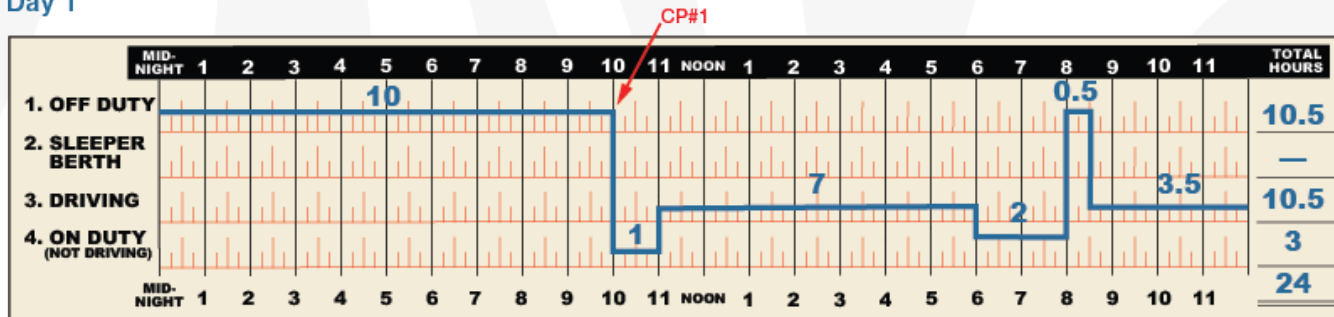
- Explanation:** This is an example of the 10 consecutive hour off-duty period. After 10 consecutive hours off duty on Day 1 starting at 10:00 a.m. (CP#1), the driver was on duty for 1 hour, drove for 5 hours, off duty for 1 hour, and drove for another 5 hours. While not having used all available hours in the 14-hour “driving window” at this point, the driver decides to take his/her 10 consecutive hour break. The driver goes off duty for 1 hour, followed by 8 hours in the sleeper-berth (S/B), followed by 1 more hour off duty. This constitutes a legal 10 consecutive hour break, and at 8:00 a.m. on Day 2 (CP#2), he/she has 11 hours of driving and 14 on-duty hours available.



REST BREAKS

30-Minute Rest Break/On-Duty Hours Past 8-Hour Mark With No Break

Day 1



- **Violations:** There are no violations.
- **Explanation:** After 10 hours off duty on Day 1, the driver goes on duty at 10:00 a.m. (CP#1). The customer is 8 driving hours away, and the driver arrives right at the 8-hour “mark” since coming on duty. This is after one hour on duty from 10:00 to 11:00 a.m. followed by 7 hours of driving. At this juncture, the driver has not yet taken his/her mandatory 30-minute rest break (§395.3(a)(3)(ii)). This rule specifies that CMV driving is not permitted if more than 8 hours have passed since the end of the driver’s last off duty or S/B period of at least 30 minutes. After arriving at the customer at the 8-hour mark, the driver spends 2 hours unloading the vehicle, and then breaks for 30 minutes, before driving another 3.5 hours within the 14-hour “driving window”. In this particular scenario the driver has not violated the 30-minute mandatory rest break provision. This is because a driver can work past the 8th hour, as long as he/she did not drive the CMV on a public highway. The driver did not drive the CMV until the mandatory 30-minute rest break was taken, after the 8th hour, and is therefore not in violation of this provision.



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